

**SECOND REPORT OF THE
NATIONAL CANCER REGISTRY
CANCER INCIDENCE IN MALAYSIA
2003**

Edited by
Gerard Lim Chin Chye
Halimah Yahaya

National Cancer Registry



Ministry of Health Malaysia

December 2004
© National Cancer Registry, Malaysia
ISSN 1675-8870

Published by:

National Cancer Registry
2nd Floor MMA House
124, Jalan Pahang
53000 Kuala Lumpur
Malaysia

Tel. : (603) 26924249
Fax : (603) 26911682
e-mail : ncr@crc.gov.my
Website: <http://www.crc.gov.my/ncr>

This report is copyright. However it may be freely reproduced without the permission of NCR. Acknowledgment would be appreciated. Suggested citation is:

GCC Lim, Y Halimah (Eds). Second Report of the National Cancer Registry. Cancer Incidence in Malaysia 2003. National Cancer Registry. Kuala Lumpur 2004.

The National Cancer Registry report is also published electronically on NCR's website at: <http://www.crc.gov.my/ncr>

FOREWORD BY THE DEPUTY MINISTER OF HEALTH, MALAYSIA



I am very pleased to launch the Second Report of the National Cancer Registry. It is significant for several reasons: (1) it confirms the findings of the first report and (2) allows the Source Data Providers and others who have been faithfully contributing data every month to the National Cancer Registry to see the results of the data contributed in 2003. This demonstrates the commitment of the National Cancer Registry to provide results in a timely manner and (3) demonstrates the viability and sustainability of the National Cancer Registry.

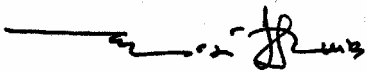
By the time this Second Report is printed, it will also be the first time that the National Cancer Registry will be under the Hospitals Division of the Ministry of Health, through the Department of Radiotherapy and Oncology. It was previously under the Division of Research and Technical Support of the Ministry of Health, through the Clinical Research Centre. In a way, we can see the maturation of the National Cancer Registry as it grows and undergoes restructuring. I appreciate the “growing pains” that is being felt by those involved with the National Cancer Registry. I urge them to be resilient and use all the resources that are available to ensure its continued success. The National Cancer Registry must continue to be run by a skilled organization that has adequate resources, and dedicated administrative personnel who are obsessed with efficiency. There must be a good and resilient leadership that galvanizes the commitment of all source data producers and health professionals involved with cancer patients. Even though the reporting of cancer cases in Malaysia is not mandatory by law, and is voluntary, I am pleased to note that the enthusiasm shown in contributing data and participating in the Expert Panel sessions is increasing year by year. For example, the number of returns in 2003 was 42,985 compared to 36,619 in 2002. This is largely due to the close rapport between the Source Data Providers, experts and staff of the National Cancer Registry, as well as the fact that the National Cancer Registry is responsive in acknowledging all data that has been contributed and in sending timely reminders to avoid big backlogs. Hence, adequate infrastructure, financial resources and adequately trained and motivated staff are all mandatory for this labour-intensive programme.

With the continued supply of reliable data about cancer in Malaysia, important decisions on planning and policy management can be made. For example, the Ninth Malaysia Plan will definitely be guided by the results of the National Cancer Registry and the other regional registries. Accurate information on the burden of cancer will enable concrete judgment and commitment as far as distribution of finite resources is concerned. The expansion of the Department of Radiotherapy and Oncology of Hospital Kuala Lumpur to Putrajaya is a good example, as the current structure and machines of Hospital Kuala Lumpur is unable to cope with the ever increasing demand for radiotherapy and oncology services. Another example is the effort made by the Ministry of Health to make Palliative Medicine an activity within the Ministry of Health, into a discipline in its own right.

I look forward to the continued dedication and sustained efforts at the National Cancer Registry, and the Third Annual Report in 2005, which I understand will be even more comprehensive and detailed as it will report on the combined data of 2002, 2003 and 2004. Meanwhile I congratulate the National Cancer Registry on its publication of its Second Report on the 2003 data.

I urge all sectors including non-governmental organizations and industry to support the National Cancer Registry as it serves all Malaysians. As the Ministry of Health alone would not be able to meet all the needs of health care single-handedly, all sectors especially the Non-Governmental Organizations are encouraged to collaborate and cooperate, in supporting the National Cancer Registry.

As the Deputy Minister of Health, I will ensure that the National Cancer Registry will receive all the help that the Ministry of Health can offer.



DATUK DR HJ ABD LATIFF BIN AHMAD

FOREWORD BY THE DIRECTOR GENERAL OF HEALTH, MALAYSIA



The Malaysian healthcare system has evolved significantly since independence. The launching of the first Malaysian National Cancer Registry Report last year and this subsequent Second Report are further milestones in the development of health care services in this country.

The government has a compelling responsibility to safeguard the health of its citizens through a holistic public health policy that provides universal, accessible and comprehensive health care for all. In this context, this registry is much needed for the further development of cancer control programs in Malaysia, such as in the formulation of policies.

The reporting from this registry will allow appropriate measures and distribution of cancer care to be taken at various levels. The benefits derived from these results will be reflected in our ability to provide effective health care services to the nation. Undoubtedly the existing cancer facilities must expand and keep abreast with the growing needs of public education on cancers, screening services, diagnostic services, preventive measures and overall treatment.

Information provided by the registry about a particular health problem should be intelligible, comprehensive, and sensitive to changes in the pattern over time or place. The National Cancer Registry is a difficult and complex undertaking. The coverage of large number of people, over a wide area, followed up over a prolonged period of time all contribute towards the high costs of setting up and operating a National Cancer Registry, whilst consistently maintaining high quality control of the data.

This Herculean task includes ensuring continued cooperation by source data producers, ensuring data validity and completeness of case ascertainment, tracing missing records, correcting data errors, eliminating duplicate entries and addressing computing difficulties. I am pleased that the National Cancer Registry has employed state of the art computer software that ensures an international standard of data confidentiality while addressing issues of de-duplication of records and matching with data from other sources such as the National Registration Department and the Information Documentation Unit of the Ministry of Health.

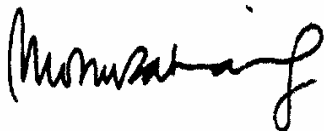
The role played by the National Cancer Registry will complement the role played by the various regional cancer registries in this country. Web-based data entry and retrieval system will be initiated by the National Cancer Registry in early 2005. This system will be more user-friendly to the Source Data Providers by being readily accessible while providing them with the ability to download their own data. This will then facilitate the sharing of information between the individual Source Data Providers with their respective regional registries. The current regional cancer registries actively collecting data are in Penang, Sabah, Sarawak, Johor, Kelantan and Pahang. The Penang Cancer Registry has been functional since January 1994 and has published its Five Year Report (1994-1998) in 2003. It is imperative that these regional registries and the National Cancer Registry complement and not compete with one another.

The Government welcomes the participation and investment by other sectors who share in the ownership of the results of the National Cancer Registry.

It is encouraging to note that not only has the National Cancer Registry been able to produce results a year from its inception, it continues to produce reports for the second consecutive year despite the challenges faced this year. These results will definitely be significant in the planning of the health system, particularly in cancer prevention and treatment in the near future. I am impressed by the effort the National Cancer Registry has taken in ensuring high quality data collection, processing, interpretation, quality control and evaluation. This report has plainly declared the rules which were employed in its decision making process, thus allowing the end users to judge for themselves the credibility of the data. The inclusion of experts from various fields, disciplines, universities and public sector in addition to those from the various divisions of the Ministry of Health have ensured that the data have been independently scrutinised, interpreted and reported.

It must be emphasised that the registry must be sustainable and be able to withstand the test of time. This launching of the Second Report of the National Cancer Registry is another step in a long journey and I hope that the current National Cancer Registry will carry on with continuous momentum and perseverance.

The Ministry of Health will continue to support the National Cancer Registry in terms of resources and address the needs the registry has in order to continue its success through reorganization and restructuring.



TAN SRI DATU DR HJ MOHAMAD TAHA BIN ARIF

ACKNOWLEDGEMENTS

The National Cancer Registry offers its grateful appreciation to everyone who helped make this report possible. We would like to especially thank the following:

- The Ministry of Health, in particular, the Honourable Minister of Health Y.B. Dr. Dato' Chua Soi Lek for his generous support.
- Director General of Health Malaysia, Tan Sri Datu Dr Mohamad Taha Bin Arif for his support and the mandate given to National Cancer Registry to function.
- Deputy Director General of Health Malaysia (Research and Technical Support) Datuk Dr. Mohd Ismail Merican, for providing support in the form of a research grant (Grant number: MRG2003-13) to fund the registry.
- Deputy Director General of Health Malaysia (Medical) Datuk Dr. Abdul Gani bin Mohammed Din for his support and accepting the transfer of the National Cancer Registry from Clinical Research Centre under the Research and Technical Support arm of Ministry of Health to the Department of Radiotherapy and Oncology under the Medical Services arm of Ministry of Health.
- Deputy Director General of Health (Public Health) Dato' Dr Shafie Bin Ooyub for his support.
- Deputy Director of the Information Documentation Systems (IDS) Unit of the MOH and the medical record departments of all participating hospitals for their continuing support.
- Finance Division of Ministry of Health for their expeditious disbursements of funds.
- The Clinical Research Centre of Ministry of Health Malaysia for their technical support.
- Oncologists, pathologists, palliative care professionals, other members of the medical profession from the various government, university, non-government and private centres, upon whose commitment, hard work, and timely data submission this report ultimately depends.
- Director of the National Registration Office (Jabatan Pendaftaran Negara).
- And of course not forgetting our supporters from the industry and other well-wishers:
 - Aventis Farma SA (M) Sdn Bhd
 - Sanofi~Synthelabo (Malaysia) Sdn Bhd
 - Meditel Electronics Sdn Bhd
 - Schering AG (Malaysia) Sdn Bhd
 - Novartis Corporation (Malaysia) Sdn Bhd
 - Roche (Malaysia) Sdn Bhd

PARTICIPATING CENTRES

- 1 ACE Lab System Sdn Bhd
- 2 Advanced Medical And Dental Institute, Universiti Sains Malaysia
- 3 Arunamari Specialist Medical Centre
- 4 AusHealth Gleneagles Oncology Centre
- 5 Bala Surgical Specialist Centre
- 6 BP Clinical Lab Sdn Bhd, Kuala Lumpur
- 7 BP Clinical Lab Sdn Bhd, Penang
- 8 Breast & Endocrine Surgery Department, Hospital Putrajaya
- 9 Breast Clinic, Surgery Department, Hospital Melaka
- 10 Breast Surgery Department, Hospital Kuala Lumpur
- 11 Breast Surgery Department, University of Malaya Medical Centre
- 12 Buddhist Tzu Chi Palliative Home-Penang
- 13 Cancer Research Centre, Stomatology Unit, Institute for Medical Research
- 14 Cancer Treatment Centre, National Cancer Society of Malaysia
- 15 Cancerlink Foundation, Ipoh
- 16 Cancerlink Foundation, KL
- 17 Cancerlink Foundation, Penang
- 18 Cancerlink Society of Malaysia, Kuantan Branch
- 19 Chest Clinic, Hospital Ipoh
- 20 Chest Clinic, Hospital Kuala Terengganu
- 21 Chest Clinic, Hospital Melaka
- 22 Chest Physician Clinic, Public Specialist Centre, Pulau Pinang
- 23 Clinipath Malaysia Sdn Bhd, KL
- 24 Clinipath Malaysia Sdn Bhd-Klang
- 25 College of Pathologists, University Malaya
- 26 Dato Yeoh Medical & Gastro Clinic, Ipoh Specialist Hospital
- 27 Department Of Breast Surgery, Hospital Pulau Pinang
- 28 Department of Medicine, Hospital Queen Elizabeth, Kota Kinabalu
- 29 Department of Surgery, Hospital Taiping
- 30 Department of Surgery, University of Malaya Medical Centre
- 31 Dermatology Department, Hospital Kuala Lumpur
- 32 Diagnostic Imaging Department, Hospital Melaka
- 33 Dr CHANG SURGICAL CLINIC, Gleneagles Intan Medical Centre KL
- 34 Dr NG SURGICAL CLINIC, Gleneagles Intan Medical Centre KL
- 35 Ear Nose Throat Head & Neck Surgery Clinic, Taiping Medical Centre
- 36 Endoscopy Clinic, Lam Wah Ee Hospital
- 37 ENT Department, Hospital Taiping
- 38 ENT, Head & Neck Surgery Clinic, Public Specialist Centre, Pulau Pinang
- 39 Faculty of Medicine, International Islamic University Malaysia
- 40 Forensic Department, Hospital Kuala Lumpur
- 41 Gastro Centre, Ipoh
- 42 Gastroenterology Clinic, Island Hospital
- 43 Gastroenterology Clinic, Penang Adventist Hospital
- 44 Gastroenterology Clinic, Subang Jaya Medical Centre
- 45 Gastroenterology Unit, Hospital Sultanah Aminah
- 46 Gastroenterology Unit, Medical Department, Hospital Kuala Lumpur
- 47 Gastrointestinal Endoscopy Unit, University of Malaya Medical Centre
- 48 General Surgery Department, Hospital Queen Elizabeth, Kota Kinabalu
- 49 General Surgery & Hepatobiliary Clinic, Island Hospital
- 50 General Surgery Clinic, Assunta Hospital

- 51 General Surgery Clinic, Dr Lim, Taiping Medical Centre
- 52 General Surgery Clinic, Dr Tan, Taiping Medical Centre
- 53 General Surgery Clinic, Hospital Universiti Kebangsaan Malaysia
- 54 General Surgery Clinic, Johor Specialist Hospital
- 55 General Surgery Clinic, Kemuning Medical Centre
- 56 General Surgery Clinic, Kuantan Specialist Hospital
- 57 General Surgery Clinic, Lam Wah Ee Hospital
- 58 General Surgery Clinic, Lourdes Medical Centre
- 59 General Surgery Clinic, Megah Medical Specialists Group Sdn Bhd
- 60 General Surgery Clinic, Pantai Cheras Medical Centre
- 61 General Surgery Clinic, Pantai Medical Centre
- 62 General Surgery Clinic, Penang Adventist Hospital
- 63 General Surgery Clinic, Pusat Pakar Klung Utama
- 64 General Surgery Clinic, Sentosa Medical Centre
- 65 General Surgery Clinic, Sri Kota Medical Centre
- 66 General Surgery Clinic, Subang Jaya Medical Centre
- 67 General Surgery Clinic, Sunway Medical Centre
- 68 General Surgery Department, Hospital Ipoh
- 69 General Surgery Department, Hospital Kuala Terengganu
- 70 General Surgery Department, Hospital Melaka
- 71 General Surgery Department, Hospital Pakar Sultanah Fatimah, Muar
- 72 General Surgery Department, Hospital Pulau Pinang
- 73 General Surgery Department, Hospital Seremban
- 74 General Surgery Department, Hospital Sultanah Aminah
- 75 General Surgery Department, Hospital Sungai Petani
- 76 General Surgery Department, Hospital Tengku Ampuan Afzan
- 77 General Surgery Department, Hospital Tengku Ampuan Rahimah
- 78 General Surgery Department, Hospital Umum Sarawak
- 79 General Surgery Department, International Medical University Clinical School
- 80 General Surgery Department, Rangkaian Hospital Seberang Jaya
- 81 General Surgery Department, Universiti Putra Malaysia
- 82 Gribbles Pathology (M) Sdn Bhd, Ipoh
- 83 Gribbles Pathology (M) Sdn Bhd, Melaka
- 84 Gribbles Pathology (M) Sdn Bhd, Penang
- 85 Gribbles Pathology (M) Sdn Bhd, Petaling Jaya
- 86 Gynae-Oncology Clinic, O&G Department, Hospital Alor Setar
- 87 Haematology Clinic, Medical Department, Hospital Melaka
- 88 Haematology Clinic, Medical Department, Hospital Pulau Pinang
- 89 Haematology Clinic, Medical Department, Hospital Queen Elizabeth, Kota Kinabalu
- 90 Haematology Clinic, Medical Department, Hospital Umum Sarawak
- 91 Haematology Clinic, Pantai Medical Centre
- 92 Haematology Department, Hospital Kuala Lumpur
- 93 Haematology Department, Hospital Universiti Kebangsaan Malaysia
- 94 Haematology Department, Subang Jaya Medical Centre
- 95 Haematology Department, University of Malaya Medical Centre
- 96 Haematology Unit, Gribbles Pathology (M) Sdn Bhd, Petaling Jaya
- 97 Haematology Unit, Hospital Ipoh
- 98 Haematology Unit, Mahkota Medical Centre
- 99 Haematology Unit, Medical Department, Hospital Sultanah Aminah
- 100 Haematology Unit, Pathology Department, Hospital Ipoh
- 101 Haematology Unit, Pathology Department, Hospital Sultanah Aminah
- 102 Haematology Unit, Pathology Department, Hospital Universiti Sains Malaysia
- 103 Haematology Unit, Universiti Putra Malaysia

- 104 Haemato-Oncology Centre, Gleneagles Medical Centre, Penang
- 105 Head and Neck Surgery Unit, University of Malaya Medical Centre
- 106 Hepatobiliary Surgery Department, Hospital Selayang
- 107 Hospice Association, Sandakan
- 108 Hospice Association, Tawau
- 109 Hospice at Home Programme, Penang
- 110 Hospice, Malacca
- 111 Hospis Malaysia, Kuala Lumpur
- 112 Hospis, Klang
- 113 Institute of Respiratory Medicine, Institut Perubatan Respiratori
- 114 Jabatan Pengimejan Diagnostik, Hospital Kuala Lumpur
- 115 Jabatan Pengimejan Diagnostik, Hospital Putrajaya
- 116 Jabatan Pengimejan Diagnostik, Hospital Tengku Ampuan Afzan
- 117 K W Chan Physician Clinic, Gleneagles Intan Medical Centre KL
- 118 Klinik Bedah Bahari, Tawakal Specialist Centre
- 119 Klinik dan Surgeri Semenyih
- 120 Klinik Pakar Bedah Chia
- 121 Klinik Pakar Perubatan Az-Zahrah
- 122 LabLink (M) Sdn Bhd-Ipoh
- 123 LabLink (M) Sdn Bhd-KL
- 124 Lum Specialist Clinic, Lum Specialist Surgical Clinic
- 125 Maha Surgical Associates Sdn Bhd, Gleneagles Intan Medical Centre KL
- 126 Mahendra Mano Specialist Surgical Clinic Sdn Bhd
- 127 Malaysian Humanitarian Foundation, KL
- 128 MD Clinic and Specialist Laboratory-Kuching
- 129 Medical Department, Hospital Kuala Lumpur
- 130 Medical Record Department, Island Hospital
- 131 Medical Record Department, Penang Adventist Hospital
- 132 Musculoskeletal Tumour Surgery Department, Hospital Universiti Sains Malaysia
- 133 Neuro Science Department, Hospital Universiti Sains Malaysia
- 134 Neurosurgery Clinic, Ampang Puteri Specialist Hospital
- 135 Neurosurgery Clinic, Gleneagles Medical Centre, Penang
- 136 Neurosurgery Clinic, Ipoh Specialist Hospital
- 137 Neurosurgery Clinic, Lam Wah Ee Hospital
- 138 Neurosurgery Clinic, Loh Guan Lye Specialist Centre
- 139 Neurosurgery Clinic, Pantai Medical Centre
- 140 Neurosurgery Department, Hospital Kuala Lumpur
- 141 Neurosurgery Department, Hospital Pulau Pinang
- 142 Neurosurgery Department, Hospital Umum Sarawak
- 143 Nilai Cancer Institute
- 144 Nuclear Medicine Radiotherapy & Oncology Department, Hospital Universiti Sains Malaysia
- 145 Obstetrics & Gynaecology Clinic, Subang Jaya Medical Centre
- 146 Obstetrics & Gynaecology Department, Hospital Kuala Lumpur
- 147 Obstetrics & Gynaecology Department, Hospital Kuala Pilah
- 148 Obstetrics & Gynaecology Department, Hospital Sultanah Aminah
- 149 Obstetrics & Gynaecology Department, Hospital Teluk Intan
- 150 Obstetrics & Gynaecology Department, Hospital Tengku Ampuan Afzan
- 151 Obstetrics & Gynaecology Department, University of Malaya Medical Centre
- 152 Oncology Department, University Putra Malaysia
- 153 Ophthalmology Department, Hospital Kuala Lumpur
- 154 Oral Pathology, Oral Medicine and Periodontology Department, Universiti Malaya
- 155 Oral Surgery Department, Hospital Kuala Lumpur
- 156 Orthopaedic Department, Hospital Kuala Lumpur

157 Otorhinolaryngology Department, Hospital Selayang
 158 Otorhinolaryngology Department, University of Malaya Medical Centre
 159 Otorhinolaryngology-Head & Neck Surgery, Hospital Universiti Kebangsaan Malaysia
 160 Otorhinolaryngology Department, Hospital Kuala Lumpur
 161 Paediatric Oncology , Subang Jaya Medical Centre
 162 Paediatric Department, Hospital Queen Elizabeth, Kota Kinabalu
 163 Paediatric Department, Hospital Umum Sarawak
 164 Paediatric Oncology Clinic, Selangor Medical Centre
 165 Paediatric Oncology Department, Hospital Kuala Lumpur
 166 Paediatric Oncology Department, Hospital Universiti Kebangsaan Malaysia
 167 Paediatric Oncology Department, Hospital Universiti Sains Malaysia
 168 Paediatric Oncology Department, University of Malaya Medical Centre
 169 Paediatric Oncology Unit, Hospital Melaka
 170 Paediatric Oncology Unit, Hospital Umum Sarawak
 171 Palliative Care Association, Kota Kinabalu
 172 Palliative Care Clinic, Hospital Seri Manjung
 173 Palliative Care Unit, Hospital Alor Setar
 174 Palliative Care Unit, Hospital Batu Pahat
 175 Palliative Care Unit, Hospital Bentong
 176 Palliative Care Unit, Hospital Jitra
 177 Palliative Care Unit, Hospital Kota Belud
 178 Palliative Care Unit, Hospital Kuala Terengganu
 179 Palliative Care Unit, Hospital Kudat
 180 Palliative Care Unit, Hospital Melaka
 181 Palliative Care Unit, Hospital Pakar Sultanah Fatimah, Muar
 182 Palliative Care Unit, Hospital Pantai Putri
 183 Palliative Care Unit, Hospital Pulau Pinang
 184 Palliative Care Unit, Hospital Queen Elizabeth, Kota Kinabalu
 185 Palliative Care Unit, Hospital Seremban
 186 Palliative Care Unit, Hospital Sipitang
 187 Palliative Care Unit, Hospital Taiping
 188 Palliative Care Unit, Hospital Tawau
 189 Palliative Care Unit, Hospital Tengku Ampuan Afzan
 190 Palliative Care Unit, Hospital Umum Sarawak
 191 Palliative Care Unit, Metro Specialist Hospital
 192 Palliative Care Unit, Rangkaian Hospital Seberang Perai
 193 Pantai Premier Pathology Sdn Bhd, KL
 194 Pathology & Clinical Laboratory (M) Sdn Bhd, JB
 195 Pathology & Clinical Laboratory (M) Sdn Bhd, Petaling Jaya
 196 Pathology Department, 94 Hospital Angkatan Tentera Kem Terendak
 197 Pathology Department, 96 Hospital Angkatan Tentera Kem Lumut
 198 Pathology Department, Assunta Hospital
 199 Pathology Department, Gleneagles Intan Medical Centre KL
 200 Pathology Department, Hospital Alor Setar
 201 Pathology Department, Hospital Ipoh
 202 Pathology Department, Hospital Kajang
 203 Pathology Department, Hospital Kangar
 204 Pathology Department, Hospital Kota Bharu
 205 Pathology Department, Hospital Kuala Lumpur
 206 Pathology Department, Hospital Kuala Pilah
 207 Pathology Department, Hospital Kuala Terengganu
 208 Pathology Department, Hospital Melaka
 209 Pathology Department, Hospital Pakar Sultanah Fatimah, Muar

210 Pathology Department, Hospital Pulau Pinang
211 Pathology Department, Hospital Putrajaya
212 Pathology Department, Hospital Queen Elizabeth, Kota Kinabalu
213 Pathology Department, Hospital Selayang
214 Pathology Department, Hospital Seremban
215 Pathology Department, Hospital Sultanah Aminah
216 Pathology Department, Hospital Sungai Petani
217 Pathology Department, Hospital Taiping
218 Pathology Department, Hospital Teluk Intan
219 Pathology Department, Hospital Tengku Ampuan Afzan
220 Pathology Department, Hospital Tengku Ampuan Rahimah
221 Pathology Department, Hospital Umum Sarawak
222 Pathology Department, Hospital Universiti Kebangsaan Malaysia
223 Pathology Department, Lam Wah Ee Hospital
224 Pathology Department, Mahkota Medical Centre
225 Pathology Department, Rangkaian Hospital Seberang Perai
226 Pathology Department, Sri Kota Medical Centre
227 Pathology Department, Subang Jaya Medical Centre
228 Pathology Department, Tawakal Specialist Centre
229 Pathology Department, University of Malaya Medical Centre
230 Pathology Department, Hospital Universiti Sains Malaysia
231 Patient Administration Department, Subang Jaya Medical Centre
232 Perak Palliative Care Society
233 Physician Clinic, Taman Desa Medical Centre Sdn Bhd
234 Plastic, Recostructive and Burn Surgery Unit, Hospital Universiti Sains Malaysia
235 Pusat Darah Negara
236 Radiology Department, Hospital Sultanah Aminah
237 Radiology Department, Megah Medical Specialists Group Sdn Bhd
238 Radiology Department, University of Malaya Medical Centre
239 Radiology Diagnosis Department, Hospital Universiti Sains Malaysia
240 Radiotherapy & Oncology Department, Damansara Specialist Hospital
241 Radiotherapy & Oncology Department, Hospital Kuala Lumpur
242 Radiotherapy & Oncology Department, Hospital Pulau Pinang
243 Radiotherapy & Oncology Department, Hospital Umum Sarawak
244 Radiotherapy & Oncology Department, Hospital Universiti Kebangsaan Malaysia
245 Radiotherapy & Oncology Department, Ipoh Specialist Hospital
246 Radiotherapy & Oncology Department, Johor Specialist Hospital
247 Radiotherapy & Oncology Department, Mahkota Medical Centre
248 Radiotherapy & Oncology Department, Mount Miriam Hospital
249 Radiotherapy & Oncology Department, Pantai Ayer Keroh Hospital
250 Radiotherapy & Oncology Department, Pantai Medical Centre
251 Radiotherapy & Oncology Department, Pantai Mutiara Hospital
252 Radiotherapy & Oncology Department, Sabah Medical Centre
253 Radiotherapy & Oncology Department, Sri Kota Medical Centre
254 Radiotherapy & Oncology Department, Subang Jaya Medical Centre
255 Radiotherapy & Oncology Department, Sunway Medical Centre
256 Radiotherapy & Oncology Department, University of Malaya Medical Centre
257 Respiratory Clinic, Hospital Pulau Pinang
258 Respiratory Medicine Department, Hospital Alor Setar
259 Rotary Hospice Programme, Johor Bahru
260 S.H. Lee Surgery Sdn Bhd, Gleneagles Intan Medical Centre KL
261 Sabah Diagnostic Centre
262 Sarawak Hospice Society

- 263 Shan Surgical Specialist, Puteri Specialist Hospital
- 264 Surgery Department, Hospital Alor Setar
- 265 Surgery Department, Hospital Kangar
- 266 Surgical Clinic, Tung Shin Hospital
- 267 The Breast Centre, Gleneagles Intan Medical Centre KL
- 268 United Laboratories Sdn Bhd, KL
- 269 Urology Clinic, Mahkota Medical Centre
- 270 Urology Department, H SAJB, Hospital Sultanah Aminah
- 271 Urology Department, Hospital Kuala Lumpur
- 272 Urology Department, Hospital Pulau Pinang
- 273 V.S.Loo Surgical Clinic Sdn. Bhd.
- 274 Y. L. Yeap Surgery Sdn Bhd, Hospital Fatimah, Ipoh
- 275 Y.L. Cheong Surgical Specialist Klinik

ABOUT THE NATIONAL CANCER REGISTRY

The National Cancer Registry (NCR) is a service supported by the Ministry of Health (MOH) to collect information about cancers in Malaysia. The information allows us to estimate the incidence of cancer, and to evaluate its risk factors, treatment and outcomes. Such information is useful for assisting the MOH, Non-Governmental Organizations, private providers and industry in program planning and evaluation, leading to cancer prevention and control.

The NCR receives data on cancer from 3 main sources:

1. The Ministry of Health hospital information system
2. The National Registration Department (Jabatan Pendaftaran Negara)
3. And most important of all, the individual doctors who provide cancer diagnostic services or who care for cancer patients, and voluntarily report data to the NCR.

The objectives of NCR are to:

1. Determine the disease burden attributable to cancer by quantifying the magnitude of cancer morbidity and mortality, and its geographic and temporal trends in Malaysia.
2. Identify subgroups in the population at high risk of cancer to whom cancer prevention effort should be targeted.
3. Identify potential risk factors involved in cancer.
4. Evaluate cancer treatment, control and prevention programme.
5. Stimulate and facilitate epidemiological research on cancer, e.g. generating hypotheses on cancer aetiology.

SPONSORS OF THE NCR

Oncology, Haematology and Pathology services, MOH
Division of Disease Control, MOH
Medical Development Division, MOH
Cancer Research Centre, Institute for Medical Research

ADVISORY COMMITTEE

Member	Designation and Institution
Dr. Gerard Lim Chin Chye (Chairperson)	Head, Department of Radiotherapy & Oncology, Hospital Kuala Lumpur
Dr. Halimah Yahaya (Co-Chairperson)	Consultant Pathologist
Dr. Ng Kok Han	Head, Cancer Research Centre, Institute for Medical Research
Dr. Hisham Shah Mohd Ibrahim	Consultant Paediatric Oncologist, Department of Paediatric, Hospital Kuala Lumpur
Dr. S.Visalachy Purushotaman	Head, Department of Heamatology, Hospital Kuala Lumpur
Dr. Lim Teck Onn	Head, Clinical Research Centre, Hospital Kuala Lumpur
Dr. Zariah Zain	Representing Director, Disease Control Division, Ministry of Health
Dr. Inderjeet Kaur Gill	Representing Director, Medical Development, Ministry of Health
Dr. Azmi Shapie	State Director of Health, Pulau Pinang
Dr. Mohd Yusof Bin Haji Ibrahim	Deputy State Director (Public Health), Sabah
Dr. Ooi Choo Huck	Head, Epidemiology Unit, State Public Health Department, Sarawak
Prof. Dr. Cheong Soon Keng	Head, Institut Kanser MAKNA, Hospital University Kebangsaan Malaysia
Dato' Dr. S.K. Dharmalingam	President, National Cancer Society of Malaysia
Dr. Mohamed Ibrahim A. Wahid	Representing: President, College of Radiology, Malaysia
Prof. Dr. Looi Lai Meng	President, College of Pathology, Malaysia
Mr Vincent Chang W.K	Representing President, Malaysia Association of Private Laboratories
Dr. Ednin Hamzah	Chief Executive Officer/Medical Director, Hospice Malaysia
Dr. Gurcharan Singh Khera	President, Malaysia Oncological Society
Dato' Dr. T. Devaraj	Chairman, Hospice at Home Programme, Penang
Dr. Anita Zarina Bustam	Head, Department of Radiotherapy & Oncology, University Malaya Medical Centre
Dr. Jamaiyah Haniff	Head, Clinical Registry Unit, Clinical Research Centre, Hospital Kuala Lumpur

EXPERT PANEL

For each major cancer site, the NCR has established an expert panel comprising members of the medical profession and allied health with expert knowledge in the area concerned.

This year the tasks of the Expert Panel were:

1. To undertake Quality Control of the reported data
2. To classify the reported tumour according to its behaviour (benign, uncertain, precursor and malignant), site, histology and diagnostic basis (clinical, morphology, histology)
3. To undertake literature review in the area relevant to the panel

List of expert panel groups:

Buccal Cavity	Male Genital Organs
Pharynx	Female Genital Organs
Digestive Organs	Urinary Organs
Nose, Sinuses and Larynx	Eye
Lower Respiratory	Brain & Nervous system
Bones etc	Endocrine Organs
Connective Tissue etc	Lymph Nodes
Skin	Paediatric Tumours
Breast	Unknown Primary Sites
Haematopoietic & Reticuloendothelial Systems	

List of Expert Panel Members:

	Name	Institution
1	Abdul Jamal B Mohamad Talhar	Department of Orthopaedics & Traumatology, Hospital Kuala Lumpur
2	Abdul Karim Tajudin	Department of Pathology, Hospital Tengku Ampuan Rahimah
3	Abdul Rahman Abdul Jamal	Department of Paediatric Oncology, Hospital University Kebangsaan Malaysia
4	Abdullah Razi Abdul Hadi	Department of Otorhinolaryngology, Hospital Kuala Lumpur
5	Ahmad Zubaidi	Department of Neurosurgery, Hospital Kuala Lumpur
6	Anita Zarina Bustam	Department of Radiotherapy & Oncology, University Malaya Medical Centre
7	Annie Tay Gwak Ching	Department of Pathology, Gleneagles Intan Medical Centre-KL
8	Asmah Johar	Department of Dermatology, Hospital Kuala Lumpur
9	Aza Miranda Bt Abdul Rahman	Department of Obstetrics & Gynaecology, Hospital Kuala Lumpur
10	Aziah Ahmad Mahayiddin	Department of Medicine, Hospital Serdang
11	Cheong Soon Keng	Department of Haematology, Hospital University Kebangsaan Malaysia
12	Chew Mee Lin	Oncological Radiographer
13	Christina Ng	Department of Radiotherapy & Oncology, University Malaya Medical Centre
14	Eow Geok Im	Department of Pathology, University Malaya Medical Centre
15	Fatimah Moosa	Department of Radiology, University Malaya Medical Centre
16	Fauziah Kassim	Department of Pathology, Hospital Kuala Lumpur
17	Foo Yoke Ching	Department of Radiotherapy & Oncology, University Putra Malaysia
18	Fuad Ismail	Department of Radiotherapy & Oncology, Hospital University Kebangsaan Malaysia
19	G. Duraisamy	Department of Haematology, University Putra Malaysia
20	Ganesanathan a/l Shanmuganathan	Department of Medicine, Hospital Kuala Lumpur
21	Gerard Lim Chin Chye	Department of Radiotherapy & Oncology, Hospital Kuala Lumpur
22	Goh Ai Sim	Department of Haematology, Hospital Pulau Pinang
23	Goh Khean Lee	Department of Medicine, Universiti Malaya Medical Centre
24	Goh Kim Yen	Department of Haematology, Hospital University Kebangsaan Malaysia

25	Gurcharan Singh Khera	Department of Radiotherapy & Oncology, Damansara Specialist Hospital
26	Halimah Yahaya	Consultant Pathologist
27	Hamidah Shaban	Institute of Respiratory Medicine
28	Harjit Kaur Perdamen Singh	Department of Breast & Endocrine Surgery, Hospital Putrajaya
29	I. Kuppusamy	Institute of Respiratory Medicine
30	Iskandar bin Hailani	Department of Otorhinolaryngology, Hospital Kuala Lumpur
31	Jameela Sather	Department of Haematology, Hospital Kuala Lumpur
32	Jayaram Menon	Department of Medicine, Hospital Queen Elizabeth
33	Joseph Alagaratnam	Department of Ophthalmology, Hospital Kuala Lumpur
34	Kalavathy Ramachandram	Department of Pathology, Hospital Tengku Ampuan Afzan
35	Kandasami Palaiyan	Department of Surgery, International Medical University
36	Khairul Muhsein B Abdullah	Department of Neurosurgery, Hospital Kuala Lumpur
37	Kua Voon Fong	Department of Radiotherapy & Oncology, Hospital Kuala Lumpur
38	Lau Shin Hin	Cancer Research Centre, Institute for Medical Research
39	Leong Wing Seng	Consultant Urologist
40	Lim Kean Ghee	Department of General Surgery, Taiping Medical Centre
41	Lim Teck Chin	Department of Urology, Makhota Medical Centre
42	Looi Lai Meng	College of Pathologists, University Malaya
43	Mahfuz Mohd Yusop	Department of Radiotherapy & Oncology, Hospital Kuala Lumpur
44	Mansor Md Noor	Department of Obstetrics & Gynaecology, Hospital Sultan Ismail – Johor Bahru
45	Md Tahir Azhar	Faculty of Medicine, International Islamic University Malaysia
46	Meor Zamari Meor Kamal	Department of Pathology, Hospital Alor Setar
47	Mohd Ridzwan B Yusoff	Department of Urology, Hospital Kuala Lumpur
48	Mohd Roslan Haron	Department of Radiotherapy & Oncology, Hospital Kuala Lumpur
49	Mokhtar Awang	Department of Obstetrics & Gynaecology, Hospital Tengku Ampuan Afzan
50	Ng Cheong Keat	Department of Obstetrics & Gynaecology, Hospital Kuala Lumpur
51	Ng Kok Han	Cancer Research Centre, Institute for Medical Research

52	Ng Kok Ying	Department of Obstetrics & Gynaecology, Hospital Kuala Lumpur
53	Ng Poh Yin	Department of Obstetrics & Gynaecology, Hospital Kuala Lumpur
54	Nik Azizah Wan Kadir	Pantai Premier Pathology Sdn Bhd -KL
55	Nik Rus Mazeni	Department of Pathology, Hospital Kuala Lumpur
56	Noorhisham Abdullah	Department of Breast & Endocrine Surgery, Hospital Putrajaya
57	Nor Aina Bt Emran	Department of Surgery, Hospital Kuala Lumpur
58	Nor Hayati Othman	Department of Pathology, Hospital University Sains Malaysia
59	Nor Laili Mohamad Mokhtar	Department of Pathology, Hospital Selayang
60	Norain Karim	Department of Pathology, Hospital Ipoh
61	Noraini Mohd Dusa,	Department of Pathology, Hospital Kuala Lumpur
62	Norshidah Abdullah	Department of Radiotherapy & Oncology, Hospital Kuala Lumpur
63	Paramananthan a/l Mariappan	Department of Urology, Hospital Kuala Lumpur
64	Peh Suat-Cheng	Department of Pathology, University Malaya Medical Centre
65	Rosline Hassan	Department of Haematology, Hospital University Sains Malaysia
66	Rosnah Mohd Zain	Faculty of Oral Pathology, Oral Medicine and Periodontology, University Malaya
67	S.Visalachy Purushotaman	Department of Haematology, Hospital Kuala Lumpur
68	Saraiza Abu Bakar	Department of Otorhinolaryngology, Hospital Kuala Lumpur
69	Sarajah Arulanantham	Department of Breast & Endocrine Surgery, Hospital Putrajaya
70	Shahbudin Bin Raja Mohamed	Department of Urology, Hospital Kuala Lumpur
71	Shahril Bin Abu Bakar	Department of Obstetrics & Gynaecology, Hospital Sultanah Aminah – Johor Bahru
72	Shalini Kumar	Department of Pathology, Hospital Seremban
73	Shamala Retnasabapathy	Department of Ophthalmology, Hospital Kuala Lumpur
74	Sharifah Noor Akmal Bt Syed Hussain	Department of Pathology, Hospital University Kebangsaan Malaysia
75	Sonny Yong Tu Kia	Department of Radiotherapy & Oncology, Hospital Pulau Pinang
76	Subathra Subaratnam	Department of Pathology, Hospital Pulau Pinang
77	Tan Kok Kheng	Consultant Obstetrician & Gynaecologist
78	Tan Sen Mui	Department of Haematology, Hospital Kuala Lumpur

79	Tan Teck Sin	Department of Obstetrics & Gynaecology, Subang Jaya Medical Centre
80	Vicknesh Visvalingam	Department of Obstetrics & Gynaecology, Hospital Seremban
81	Vincent Phua Chee Ee	Department of Radiotherapy & Oncology, Hospital Kuala Lumpur
82	Wahidah Abdullah	Department of Pathology, Hospital Selayang
83	Wan Azura Wan Yaakob	Department of Pathology, Hospital Seremban
84	Wan Muhaizan Wan Mustaffa	Department of Pathology, Hospital University Kebangsaan Malaysia
85	Yip Cheng Har	Department of Breast Surgery, University Malaya Medical Centre
86	Yang Jin Rong	Consultant Urologist
87	Zakaria Bin Jusoh	Department of Pathology, Hospital Kuala Terengganu
88	Zubaidah Zakaria	Department of Haematology, Institute for Medical Research

STAFF OF THE NATIONAL CANCER REGISTRY

Cancer Registry Manager	Sister Choo Soke Har (16/06/02-31/12/04) Staff Nurse Cheang Moey Heong (1/1/05 onwards)
Clinical Registry Associate	Ms Nurul Huda Abdullah
Clinical Registry Associate	Ms Nora Mohd Jelas

SUPPORTING STAFF FROM THE CLINICAL RESEARCH CENTRE

The Clinical Research Centre of the Ministry of Health provides technical support for the National Cancer Registry. The clinical epidemiologists provide methodological and epidemiological inputs while the database is supported on CRC's IT infrastructure.

Clinical Epidemiologist	Dr. Jamaiyah Haniff
Clinical Epidemiologist	Dr. Sanjay Rampal
Clinical Epidemiologist	Dr. Anita Das
Information & Communication Technology (ICT) Manager	Ms Celine Tsai Pao Chien
Network Administrator	Mr. Kevin Ng Hong Heng
Assistant Network Administrator	Mr. Adlan Ab. Rahman
Database Administrator	Ms. Lim Jie Ying
Webmaster	Mr. Patrick Lum See Kai
Programmer	Mr. Sebastian Thoo / Mr. John Chong
Desktop publisher	Ms Azizah Alimat

BIostatistical CONSULTANTS

Biostatistician	Dr. Sharon Chen Won Sun
Biostatistician	Ms. Teh Poh Geok

CONTENTS

FOREWORD BY THE DEPUTY MINISTER OF HEALTH, MALAYSIA	3
FOREWORD BY THE DIRECTOR GENERAL OF HEALTH, MALAYSIA	5
ACKNOWLEDGEMENTS	7
PARTICIPATING CENTRES	8
ABOUT THE NATIONAL CANCER REGISTRY	14
SPONSORS OF THE NCR	14
ADVISORY COMMITTEE	15
EXPERT PANEL	16
STAFF OF THE NATIONAL CANCER REGISTRY	21
SUPPORTING STAFF FROM THE CLINICAL RESEARCH CENTRE	21
BIostatistical CONSULTANTS	21
CONTENTS	22
ABBREVIATIONS	32
INTRODUCTION	33
REPORT SUMMARY	34
1. OVERALL CANCER INCIDENCE	34
2. CANCER BURDEN	34
3. VARIATION IN CANCER INCIDENCE BY AGE, SEX AND ETHNICITY	35
4. INDIVIDUAL CANCERS	36
CHAPTER 1 CANCER INCIDENCE IN MALAYSIA 2003	45
1.1 Overall cancer incidence	45
1.2 Cancer Incidence by site	48
CHAPTER 2 Selected cancer sites 2003	68
2.1 TONGUE	68
2.2 SALIVARY GLAND	70
2.3 MOUTH	72
2.4 NASOPHARYNX	74
2.5 OESOPHAGUS	76
2.6 STOMACH	78
2.7 COLON	80
2.8 RECTUM	82
2.9 LIVER	84
2.10 GALLBLADDER, ETC	86
2.11 PANCREAS	88
2.12 NOSE AND SINUSES	90
2.13 LARYNX	92
2.14 LUNG	94
	22

2.15 BONE.....	96
2.16 OTHER SKIN.....	98
2.17 MELANOMA.....	100
2.18 FEMALE BREAST.....	102
2.19 CERVIX UTERI.....	104
2.20 CORPUS UTERI.....	106
2.21 OVARY.....	108
2.22 PROSTATE.....	110
2.23 BLADDER.....	112
2.24 KIDNEY AND OTHER URINARY ORGANS.....	114
2.25 BRAIN AND OTHER NERVOUS SYSTEM.....	116
2.26 THYROID.....	118
2.27 LYMPHOMA.....	120
2.28 LYMPHATIC LEUKAEMIA.....	124
2.29 MYELOID LEUKAEMIA.....	126
REFERENCES.....	128
APPENDICES.....	129
Table A1: New cases of cancer and percentage of total number of cases by site, age and sex, Peninsular Malaysia 2003.....	129
Table A2: Age specific Cancer Incidence per 100,000 population, Age standardized incidence and Cumulative risk, by site, age and sex, Peninsular Malaysia 2003.....	134
Table A3: Age, sex and ethnic distribution of the population of Peninsular Malaysia 2003.....	139
Table A4: Age and sex distribution of the population of Sabah 2003.....	140
Table A5: Age and sex distribution of the population of Sarawak 2003.....	141

List of Tables

Table 1.1.1: Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Malaysia 2003	45
Table 1.1.2: Cancer Incidence per 100,000 population (CR) by age and sex, Peninsular Malaysia 2003	45
Table 1.1.3: Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003	46
Table 1.1.4: Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003	46
Table 1.2.1: Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by site and sex, Peninsular Malaysia 2003	48
Table 1.2.2: Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by site ethnicity and sex, Peninsular Malaysia 2003	50
Table 1.2.3: Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by site age and sex, Peninsular Malaysia 2003	58
Table 2.1.1: Tongue Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003	68
Table 2.1.2: Tongue Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003	68
Table 2.1.3: Tongue Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003	69
Table 2.1.4: Tongue Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003	69
Table 2.2.1: Salivary Gland Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003	70
Table 2.2.2: Salivary Gland Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003	70
Table 2.2.3: Salivary Gland Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003	71
Table 2.2.4: Salivary Gland Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003	71
Table 2.3.1: Mouth Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003	72
Table 2.3.2: Mouth Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003	72
Table 2.3.3: Mouth Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003	73
Table 2.3.4: Mouth Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003	73
Table 2.4.1: Nasopharynx Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003	74
Table 2.4.2: Nasopharynx Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003	74
Table 2.4.3: Nasopharynx Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003	75

Table 2.4.4: Nasopharynx Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003	75
Table 2.5.1: Oesophagus Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003	76
Table 2.5.2: Oesophagus age specific Cancer Incidence per 100,000 population (CR), by age and sex, Peninsular Malaysia 2003	76
Table 2.5.3: Oesophagus Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003.....	77
Table 2.5.4: Oesophagus Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003	77
Table 2.6.1: Stomach Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003	78
Table 2.6.2: Stomach Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003	78
Table 2.6.3: Stomach Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003	79
Table 2.6.4: Stomach Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003	79
Table 2.7.1: Colon Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003	80
Table 2.7.2: Colon Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003	80
Table 2.7.3: Colon Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003	81
Table 2.7.4: Colon Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003	81
Table 2.8.1: Rectum Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003	82
Table 2.8.2: Rectum Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003	82
Table 2.8.3: Rectum Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003	83
Table 2.8.4: Rectum Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003	83
Table 2.9.1: Liver Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003	84
Table 2.9.2: Liver Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003	84
Table 2.9.3: Liver Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003	85
Table 2.9.4: Liver Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003	85
Table 2.10.1: Gallbladder Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003	86

Table 2.10.2: Gallbladder Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003.....	86
Table 2.10.3: Gallbladder Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003.....	87
Table 2.10.4: Gallbladder Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003.....	87
Table 2.11.1: Pancreas Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003.....	88
Table 2.11.2: Pancreas Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003.....	88
Table 2.11.3: Pancreas Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003.....	89
Table 2.11.4: Pancreas Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003.....	89
Table 2.12.1: Nose and Sinuses Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003.....	90
Table 2.12.2: Nose and Sinuses Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003.....	90
Table 2.12.3: Nose and Sinuses Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003.....	91
Table 2.12.4: Nose and Sinuses Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003.....	91
Table 2.13.1: Larynx Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003.....	92
Table 2.13.2: Larynx Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003.....	92
Table 2.13.3: Larynx Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003.....	93
Table 2.13.4: Larynx Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003.....	93
Table 2.14.1: Lung Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003.....	94
Table 2.14.2: Lung Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003.....	94
Table 2.14.3: Lung Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003.....	95
Table 2.14.4: Lung Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003.....	95
Table 2.15.1: Bone Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003.....	96
Table 2.15.2: Bone Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003.....	96
Table 2.15.3: Bone Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003.....	97

Table 2.15.4: Bone Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003.....	97
Table 2.16.1: Other Skin Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003.....	98
Table 2.16.2: Other Skin Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003.....	98
Table 2.16.3: Other Skin Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003.....	99
Table 2.16.4: Other Skin Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003.....	99
Table 2.17.1: Melanoma Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003.....	100
Table 2.17.2: Melanoma Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003.....	100
Table 2.17.3: Melanoma Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003.....	101
Table 2.17.4: Melanoma Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003.....	101
Table 2.18.1: Female Breast Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), Peninsular Malaysia 2003.....	102
Table 2.18.2: Female Breast Age specific Cancer Incidence per 100,000 population (CR), Peninsular Malaysia 2003.....	102
Table 2.18.3: Female Breast Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity, Peninsular Malaysia 2003.....	103
Table 2.18.4: Female Breast Age specific Cancer Incidence per 100,000 population, by ethnicity, Peninsular Malaysia 2003.....	103
Table 2.19.1: Cervix Uteri Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), Peninsular Malaysia 2003.....	104
Table 2.19.2: Cervix Uteri Age specific Cancer Incidence per 100,000 population (CR), Peninsular Malaysia 2003.....	104
Table 2.19.3: Cervix Uteri Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity, Peninsular Malaysia 2003.....	105
Table 2.19.4: Cervix Uteri Age specific Cancer Incidence per 100,000 population, by ethnicity, Peninsular Malaysia 2003.....	105
Table 2.20.1: Corpus Uteri Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), Peninsular Malaysia 2003.....	106
Table 2.20.2: Corpus Uteri Age specific Cancer Incidence per 100,000 population (CR), Peninsular Malaysia 2003.....	106
Table 2.20.3: Corpus Uteri Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity, Peninsular Malaysia 2003.....	107
Table 2.20.4: Corpus Uteri Age specific Cancer Incidence per 100,000 population, by ethnicity, Peninsular Malaysia 2003.....	107
Table 2.21.1: Ovary Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), Peninsular Malaysia 2003.....	108

Table 2.21.2: Ovary Age specific Cancer Incidence per 100,000 population (CR), Peninsular Malaysia 2003	108
Table 2.21.3: Ovary Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity, Peninsular Malaysia 2003	109
Table 2.21.4: Ovary Age specific Cancer Incidence per 100,000 population, by ethnicity, Peninsular Malaysia 2003	109
Table 2.22.1: Prostate Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), Peninsular Malaysia 2003	110
Table 2.22.2: Prostate Age specific Cancer Incidence per 100,000 population (CR), Peninsular Malaysia 2003	110
Table 2.22.3: Prostate Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity, Peninsular Malaysia 2003	111
Table 2.22.4: Prostate Age specific Cancer Incidence per 100,000 population, by ethnicity, Peninsular Malaysia 2003	111
Table 2.23.1: Bladder Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003	112
Table 2.23.2: Bladder Age specific Cancer Incidence per 100,000 population (CR), by sex, Peninsular Malaysia 2003	112
Table 2.23.3: Bladder Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003	113
Table 2.23.4: Bladder Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003	113
Table 2.24.1: Kidney and Other Urinary Organs Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003	114
Table 2.24.2: Kidney and Other Urinary Organs Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003.....	114
Table 2.24.3: Kidney and Other Urinary Organs Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003	115
Table 2.24.4: Kidney and Other Urinary Organs Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003	115
Table 2.25.1: Brain and Other Nervous System Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003	116
Table 2.25.2: Brain and Other Nervous System Age specific Cancer Incidence per 100,000 population (CR), by sex, Peninsular Malaysia 2003.....	116
Table 2.25.3: Brain and Other Nervous System Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003	117
Table 2.25.4: Brain and Other Nervous System Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003	117
Table 2.26.1: Thyroid Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003	118

Table 2.26.2: Thyroid Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003	118
Table 2.26.3: Thyroid Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003	119
Table 2.26.4: Thyroid Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003	119
Table 2.27.1: Lymphoma Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003.....	120
Table 2.27.2: Lymphoma Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003.....	120
Table 2.27.3: Lymphoma Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003.....	121
Table 2.27.4: Lymphoma Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003	121
Table 2.27.1.1: Hodgkin's Lymphoma Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003.....	122
Table 2.27.2.1: Non Hodgkin's Lymphoma Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003.....	123
Table 2.28.1: Lymphatic Leukaemia Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003.....	124
Table 2.28.2: Lymphatic Leukaemia Age specific Cancer Incidence per 100,000 population (CR), by sex, Peninsular Malaysia 2003.....	124
Table 2.28.3: Lymphatic Leukaemia Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003.....	125
Table 2.28.4: Lymphatic Leukaemia Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003	125
Table 2.29.1: Myeloid Leukaemia Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003.....	126
Table 2.29.2: Myeloid Leukaemia Age specific Cancer Incidence per 100,000 population (CR), by sex, Peninsular Malaysia 2003.....	126
Table 2.29.3: Myeloid Leukaemia Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003.....	127
Table 2.29.4: Myeloid Leukaemia Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003	127

List of Figures

Figure 1.2.1(a) Ten most frequent cancers in males, Peninsular Malaysia 2003	47
Figure 1.2.1(b) Ten most frequent cancers in females, Peninsular Malaysia 2003	47
Figure 1.2.2(a): Ten most frequent cancers in males by ethnic groups, Peninsular Malaysia 2003	56
Figure 1.2.2(b): Ten most frequent cancers in females by ethnic groups, Peninsular Malaysia 2003	57
Figure 1.2.3(a): Ten most frequent cancers in males by age groups, Peninsular Malaysia 2003	66
Figure 1.2.3(b): Ten most frequent cancers in females by age groups, Peninsular Malaysia 2003	67
Figure 2.1.1: Tongue Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003	68
Figure 2.3.1: Mouth Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003	72
Figure 2.4.1: Nasopharynx Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003	74
Figure 2.5.1: Oesophagus Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003	76
Figure 2.6.1: Stomach Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003	78
Figure 2.7.1: Colon Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003	80
Figure 2.8.1: Rectum Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003	82
Figure 2.9.1: Liver Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003	84
Figure 2.10.1: Gallbladder Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003	86
Figure 2.11.1: Pancreas Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003	88
Figure 2.12.1: Nose and Sinuses Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003	90
Figure 2.13.1: Larynx Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003	92
Figure 2.14.1: Lung Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003	94
Figure 2.15.1: Bone Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003	96
Figure 2.16.1: Other Skin Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003	98
Figure 2.17.1: Melanoma Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003	100
Figure 2.18.1: Female Breast Age specific Cancer Incidence per 100,000 population, Peninsular Malaysia 2003	102
Figure 2.19.1: Cervix Uteri Age specific Cancer Incidence per 100,000 population, Peninsular Malaysia 2003	104
Figure 2.20.1: Corpus Uteri Age specific Cancer Incidence per 100,000 population, Peninsular Malaysia 2003	106

Figure 2.21.1: Ovary Age specific Cancer Incidence per 100,000 population, Peninsular Malaysia 2003	108
Figure 2.22.1: Prostate Age specific Cancer Incidence per 100,000 population, Peninsular Malaysia 2003	110
Figure 2.23.1: Bladder Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003	112
Figure 2.24.1: Kidney and Other Urinary Organs Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003.....	114
Figure 2.25.1: Brain and Other Nervous System Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003.....	116
Figure 2.26.1: Thyroid Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003	118
Figure 2.27.1: Lymphoma Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003	120
Figure 2.27.1.1: Hodgkin’s Lymphoma Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003.....	122
Figure 2.27.2.1: Non Hodgkin’s Lymphoma Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003.....	123
Figure 2.28.1: Lymphatic Leukaemia Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003.....	124
Figure 2.29.1: Myeloid Leukaemia Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003.....	126

ABBREVIATIONS

ASR	Age-standardized Incidence Rate
CR	Crude Incidence Rate
CRC	Clinical Research Centre
CRU	Cancer Registry Unit
CumR	Cumulative Risk
HMIS	Hospital Management Information System
IACR	International Association of Cancer Registry
IARC	International Agency for Cancer Research
IC	Identification card
ICD	International Classification of Disease, WHO
ICD -10	International Classification of Diseases 10 th Edition
ICD-O	International Classification of Disease for Oncology, WHO
MOH	Ministry of Health, Malaysia
NCR	National Cancer Registry
QC	Quality control
SDP	Source Data Provider or Producer
SOP	Standard Operating Procedure
USA	United States of America
WHO	World Health Organization

INTRODUCTION

The Second Report of the National Cancer Registry describes the morbidity burden of cancer from 1st January 2003 to 31st December 2003. This second report will be mainly a descriptive report, in view of the fact that a Third Report will follow in 2005. The Third Report will take into account the combined data for the years 2002, 2003 and 2004, and will have detailed analysis, interpretation and comparison of data including morphology classification.

As in the previous report, the data for Sabah and Sarawak are mentioned in summary in Table 1.1.1 and not described further as under-ascertainment undermines any further interpretation of the data from these states. It is likely that after three to five years, the data from East Malaysia can then be reliably published. The data collected from Sabah and Sarawak is being shared officially with the Regional Registries of these states, which will also be analysing and looking into their own data.

With the advent of the web-based data entry and retrieval system which will be initiated for the National Cancer Registry by early 2005, all Source Data Providers can potentially access and download their own data and therefore enabling a more ready access to their own data. Other data that are requested will continue to require a formal request for data with the usual procedures to ensure confidentiality of patients.

While some parties have expressed reservations about how the National Cancer Registry was able to handle the data for a population of over 20 million, it is important to understand that the National Cancer Registry had invested heavily in hardware and software that can address the de-duplication and analysis of thousands of records.

The launching of the Second National Cancer Registry Report on 13th December 2004 at Hospital Kuala Lumpur by the Honourable Deputy Minister of Health, Datuk Dr Abdul Latiff could never materialize without the support of everyone involved in the care of patients with cancer. The second report is the result and culmination of all their efforts put together over the past one year. The second report might not have been possible if not for the last minute injection of rescue funds generously provided by the Minister of Health Y.B. Dato' Dr. Chua Soi Lek and the expeditious disbursement of the funds by the Finance Division of Ministry of Health.

We would also like to take this opportunity to express our gratitude to our source data producers, members of the various expert panels, the staff of the National Cancer Registry and all those who have in some way or another contributed in making the Second Report a success. Much of the work was carried out behind the scenes and we would like to record our sincere thanks to all those who did so. We highly value the excellent work put in by the Cancer Registry Unit, the members of the Expert Panel, members of the Advisory Committee and Organizing Committee of the launch of the Second Report.

We apologize that due to reasons beyond our control, all the Source Data Providers and Expert Panel members could not be given an earlier invitation to the launch of the Second Report. We look forward to a bigger group of participants next year, in which a scientific meeting will be organized in conjunction with the launch of the Third Report by 2005. We appeal to all source data providers for their continued and enthusiastic support in providing their data to ensure better ascertainment in future reports.

It is our sincere hope that the Ministry of Health will continue to support the National Cancer Registry. Together with all other parties, the National Cancer Registry will benefit the nation by contributing effectively towards the control of cancer in this country.

The Editors of the Second Report of National Cancer Registry

REPORT SUMMARY

1. OVERALL CANCER INCIDENCE

A total of 21,464 cancer cases were diagnosed among Malaysians in Peninsular Malaysia in the year 2003, comprising 9,400 males and 12,064 females. The corresponding figures for Sabah and Sarawak are shown in Table 1.1.1. As the ASR were considerably lower than that of Peninsular Malaysia, there is serious doubt about the completeness of cancer registration from these two East Malaysian States. Hence, they were omitted from further analysis in this report. On the other hand, case ascertainment for Peninsular Malaysia was likely to be as good as for year 2002 if not better in terms of lower inclusion of prevalent cases. Certainly, as can be seen from the ethnic specific ASR, case ascertainment for the NCR is comparable with that of the Penang Cancer Registry.

The National Cancer Registry received 42,985 cancer notifications of Malaysian residents in 2003 of which 23,746 were unique incident cancer cases. Thus there were 1.8 notifications per case. Of the 23746 cases, 22622 cases had histological verification thus 95.3 % of the cases had histological verification. There were 511 cases coded as Primary Site Uncertain representing 2.2% of the total cases. There were no missing data for race and age variable whereas there was only 1 case with missing sex.

The 2003 cancer incidence results presented in the rest of this report refer only to Peninsular Malaysia.

2. CANCER BURDEN

The crude rate for males was 97.4 per 100,000 population and 127.6 per 100,000 population for females. The age standardized incidence rate for all cancers in the year 2003 was 134.3 per 100,000 males and 154.2 per 100,000 females.

Generally the cancer incidence rates were lower than in 2002 suggesting we have been more successful in eliminating prevalent cases (rather than the alternative possibility of deteriorating ascertainment, as explained above). This was to be expected of a maturing registry. There appears to be a continuing problem with differential under-ascertainment in the 2003 data especially affecting lung cancers.

On the other hand, the fact that unusual findings that were noted in the first report are convincingly repeated in the second report deserve special attention and study, such as the ranking of leukaemia among the top 5 cancers in males and top 10 cancers in females. While the cancer rates for 2003 were generally lower, they are not that far off from 2002 results (which had included more prevalent cases), relative ranking of cancer incidence was largely consistent, and most statements still held true. For example, incidence of nasopharyngeal cancer among Chinese was still very high, and comparable to Singapore

To overcome the problem of under-ascertainment in some of the tumour sites mentioned above, the reporting of cases to the National Cancer Registry had been extended to include the chest physicians, gastroenterologist, hepatobiliary surgeons, neurosurgeons and radiologists in addition to the pathologists, oncologists and palliative care personnel. However, this would only show an effect on cancer trends from the middle of 2003 onwards.

3. VARIATION IN CANCER INCIDENCE BY AGE, SEX AND ETHNICITY

Cancer occurred at all ages. The median age at diagnosis for cancer in Malaysian males was 59 years and 53 years for Malaysian females. The 5 most frequent cancers in children (0-14 years old) were leukaemia, cancers of the brain, lymphoma, cancers of the connective tissue and kidney. In the group of young adults (15-49 years old), the common cancers were nasopharynx, leukaemia, lymphoma, lung, colon and rectum in men, and cancers of the breast, cervix, ovary, uterus, thyroid gland and leukaemia in women. In older subjects (50 years old and above), cancers of the lung, colon, rectum, nasopharynx, prostate and stomach were predominant among men, while cancers of the breast, cervix, colon, uterus, lung and rectum occurred commonly in women.

The crude incidence rate of age groups by sex, showed an increasing trend of incidence with age. The crude incidence rate for males aged 0-19 years was 18.0 per 100,000 population; aged 20-39 years was 33.0 per 100,000; aged 40-59 years was 168.6 per 100,000 population and aged 60+ years was 731.8 per 100,000 population.

The crude incidence rate for females aged 0-19 years was 14.0 per 100,000 population; aged 20-39 years was 54.8 per 100,000; aged 40-59 years was 318.2 per 100,000 population and aged 60+ years was 591.1 per 100,000 population.

The overall male crude incidence rate of 97.4 per 100,000 population was lower than the female crude incidence rate of 127.6 per 100,000 population. The male to female ratio of cancer incidence is 1:1.3. The most common cancer in males in the year 2003 was cancer of the lung (13.8% of all male cancers). Whereas among females, the most frequent cancer was cancer of the breast (31.0% of all female cancers).

There is variation of cancer incidence rate between the different ethnic groups. The crude incidence rate for cancers in Malay male and females were 60.6 and 79 per 100,000 population respectively; for Chinese male and females 169.2 and 217.7 per 100,000 population respectively; and for the Indian male and females 85.7 and 147.2 per 100,000 population respectively.

4. INDIVIDUAL CANCERS

4.1 FEMALE BREAST CANCER

In 2003, there were 3738 female breast cancer cases that were reported, making it the most commonly diagnosed cancer in women. It accounted for 31.0 % of newly diagnosed female cases. Breast cancer was the commonest cancer in all ethnic groups and all age groups in females from the age of 15 years. The overall ASR was 46.2 per 100,000 population.

The age pattern in 2003 showed a peak age specific incidence rate at the 50-59 age group in Malays, Chinese, and Indians, and the rates then declined in the older age groups. Of the cases diagnosed in 2003, 64.1 % were in women between 40 and 60 years of age.

Chinese had the highest incidence with an ASR of 59.7 per 100,000 population followed by Indian women with an ASR of 55.8 per 100,000 population and Malay women with an ASR of 33.9 per 100,000 population. Compared to 2002 data, the ASR is lower for all races, but the age-specific incidence patterns are very similar.

4.2 LUNG CANCER

A total of 1758 incident cases of lung cancer were reported, comprising 13.8% of male cancers and 3.8% of female cancers. The male: female ratio in terms of incidence for Peninsular Malaysia was 2.8 : 1. Rates of lung cancer rose progressively with age for both males and females. There was a steeper rise in incidence after the age of 40 years for both sexes, with a progressive divergence of the curves for the two sexes.

The incidence of lung cancer among the Chinese was higher than the other ethnic groups. The age-standardized incidence rate (ASR), for Chinese was more than twice that of Malays and Indians for both sexes.

Even though lung cancer was in second place when colon and rectum were added together, caution has to be exercised in its interpretation. This is because of : a) the ascertainment rate calculated at 68% for 2002 data, and b) comparing the age incidence rate with reports from Singapore and Penang.

We remind the reader that for this cancer, the registration was almost certainly incomplete. The specific recruitment of radiologists and chest physicians to report cancers to the NCR from the middle of 2003 onwards, it is hoped that more complete results will be available in the future.

4.3 COLON AND RECTUM CANCER

Cancers of the colon and rectum were recorded separately in this report. On their own each of them ranked among the top ten most common cancers in Malaysia. When taken together, colorectal cancers would account for 14.2% of male cancers making it the commonest cancer among men and the third most common cancer among women (10.1% of female cancers).

The male to female ratio for colon cancer was nearly equal (0.98:1), with the frequency in males rising more rapidly after the age of 60 years. In rectal cancer, the preponderance of males was more noticeable (1.26:1), with a steeper rise in age specific incidence of males occurring at age of 50 years onwards.

The age specific incidence for both colon and rectal cancers increased exponentially with age. Chinese had a higher incidence of colon cancers than the other races. Comparing the crude rates between Chinese and Malays, Chinese had more than 5.1 times the incidence of male colon cancer, and 4.6 times the incidence of female colon cancer. With regard to rectal cancers, Chinese had the highest incidence rate of rectal cancers which was 2.8 times the Malay male incidence and 3.4 times the Malay females.

4.4 CERVICAL CANCER

Cancer of the cervix was the second most common cancer among women. It constituted 12.9% of total female cancers. There were a total of 1,557 cases of cancer cervix, with an ASR of 19.7 per 100,000 population.

Cervical cancer incidence rate increased with age after 30 years. It has a peak incidence rate at ages 60 -69 years, and declined thereafter. These features were very similar to data in 2002.

Chinese women had the highest ASR of 28.8 per 100,000 population, followed by Indians with ASR of 22.4 per 100,000 population and Malays with ASR of 10.5 per 100,000 population.

4.5 LEUKAEMIA

A total of 539 cases of myeloid leukaemia and 433 cases of lymphatic leukaemia were reported comprising 4.5% of the total number of cancers. Males predominated at a ratio of 1.7:1 for lymphatic leukaemia and 1.1:1 for myeloid leukaemia. Leukaemia was the fourth commonest cancer in males and seventh in females.

Age specific incidence curves of lymphatic leukaemia demonstrated a bimodal pattern. Leukaemia was the commonest cancer in children less than 15 years old. It was the second highest cancer among the 15-49 year old males, and the sixth commonest among the 15-49 year old females. Leukaemia was no longer among the top 10 list after age 50 years for both sexes.

4.6 NASOPHARYNGEAL CANCER

Nasopharyngeal cancer was the second most common cancer among men. It constituted 8.8% of total male cancers. There were a total of 1,125 cases of nasopharyngeal cancer, with an age standardized incidence of 10.2 and 3.6 per 100,000 population for males and females respectively. The male to female ratio is 2.75:1.

The age specific incidence increased after 30 years with a peak incidence rate at ages 60 - 69 years, and declined thereafter. These features are very similar to data in 2002.

Chinese men had the highest age standardized incidence rate (18.1 per 100,000 population) followed by Chinese women (7.4 per 100,000 population), Malay males (4.8 per 100,000 population) and Indian males (2.6 per 100,000 population).

4.7 PROSTATE CANCER

There was a total of 602 cases reported (6.4%) making it the 6th most common cancer among males overall. The age specific incidence rate rises sharply after the age of 60. The overall age standardised incidence was 10.3per 100,000 population.

METHODS

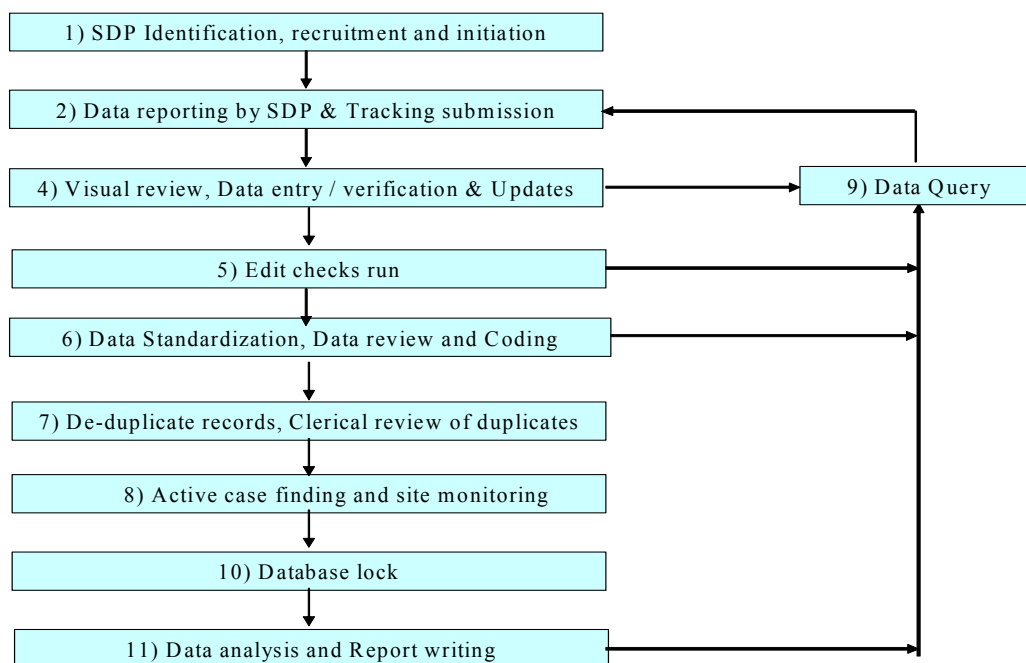
The Cancer Registry Unit in CRC was established to provide the functional capacity to support the operations of the NCR.

To achieve the objectives of the NCR, the function of the CRU is to ensure:

1. Complete enumeration of all incident cases of cancer in the population
2. Validity of the data collected on these cases of cancer
3. Correct and reproducible classification and coding
4. Complete follow-up until migration out of the population or death.

These are accomplished by a series of tasks as shown in the figure below.

Operations of the NCR



Selection, identification, recruitment and motivation of Source Data Provider

Ideally, any individual or institution that has access to cancer related information should become a Source Data Provider (SDP). However, that means almost every medical practitioner in the country. This ideal is clearly not achievable. In practice one must select SDPs judiciously. This was based on consideration of data validity, the burden associated with identifying cases and the requirement for a wide case finding network that deliberately includes multiple source reporting so that a case will be reported by at least one of the sources. Based on these, the type of SDPs targeted for recruitment by NCR was from the following disciplines: pathology, oncology, haematology, palliative care, and selected practices that manage specialized cancers such as breast, endocrine, and supplemented by data downloaded from routine hospital information system. Chest physicians, gastroenterologist, hepatobiliary surgeons, neurosurgeons and radiologists

were recruited in the middle of June 2003 to increase the ascertainment rates of cancers with problem of under-ascertainment.

Once the SDPs were identified, no efforts were spared in persuading them to voluntarily participate in the NCR and to motivate them to continue reporting data. The influence of key opinion leaders and professional societies, together with extensive marketing were employed using various media such as website, brochure, trade exhibition, face-to-face talks, meetings and organized events. Further, NCR ensured wide representation in its activity through appointment to its Advisory Committee and through opportunity to participate in Expert Panel and NCR supported research activities.

In 2003 NCR managed to maintain a very high participation rate of targeted SDPs and ensured their continued cooperation. The total number of SDP has increased from 141 in 2002 to 275 in 2003.

Data reporting by SDP

Participating SDPs report data on new cancer cases to the NCR on a monthly basis. The case definition was deliberately liberal. SDPs were instructed to report a case even when they have doubt about case eligibility. The eligibility and validity of the reported cases were subsequently sorted out by Expert Panels centrally.

To minimize the burden associated with data reporting, only 7 data items were required for each reported case. These are patient's name, identification number (old/new), age, sex, race (optional), topography (specimen/ site/organ involved), and morphology (cytology or histology). Due to strong suggestions by international experts, the data items may eventually include other items. This will be discussed at the next scientific meeting at the launching of the 3rd report when all the SDPs can participate and come to a consensus.

Data submissions by SDPs were tracked by NCR computer system, which flag any late submission and automatically send a reminder. In this way, NCR was able to achieve almost complete data submission. All participating SDPs submitted all 12 months' data for the year 2003.

Visual review, data entry/update and edit checks

Data received by the NCR were logged-in and manually reviewed to check for completeness and obvious errors or problems. Data without apparent problems were entered into the registry database. Edit checks were performed periodically to identify potential data errors, such as missing data, non-allowed values, out of range numeric values, inconsistent data and error with de-duplication. Data queries that are resolved are then updated to the database.

Data Standardisation and Preliminary De-duplication

For the preparation of the 2003 report, NCR used the QualityStage software from Ascential™ to perform data standardization and preliminary data de-duplication. Data standardisation incorporated the following processes:

- Handling of missing data. For example, deriving age from IC, deriving gender from IC and name and inferring race from name.
- Checking inconsistency of the data. For example, IC and name shows female but gender is male
- Correction of typographical errors
- Standardize commonly occurring words
- Name parsing and concatenation - Parse name into a set of fixed subcomponents that are in fixed locations to enable cross component checking during de-duplication

Subsequently, preliminary data de-duplication is performed to identify duplicates and prepare the data for expert panel review.

Data review and coding

Cancer data was initially automatically coded by the NCR's QualityStage software. This process used a keyword dictionary to code topography (specimen/ site/organ involved) that is written in free text to ICD-O3 topography codes. The 2003 keyword dictionary was updated and specific rules were applied with input from subject matter experts and epidemiologists to make the dictionary comprehensive yet specific. This is an iterative process.

To maintain rigorous quality control (QC) of NCR data, an expert panel group comprising members of the medical profession and allied health with expertise and knowledge in the relevant area was established for each cancer site. The tasks of the Expert Panel were to:

- Undertake final QC review of the reported data to ensure only meaningful and valid data were included in NCR report.
- Classify the reported tumour according to its behaviour (benign, uncertain, precursor and malignant), site, histology and diagnostic basis (clinical, morphology, histology)

The NCR followed IARC/IACR recommendation and used the ICD-O3 classification system for coding its cancer data. This system provided detailed codes for both topography and morphology, and has enjoyed wide international acceptance, which is important for comparability of results.

Data de-duplication

The NCR, like other cancer registries, had adopted a multiple source reporting strategy to minimize under-registration and maximize data validity. The inevitable problem arising of such a strategy was the multiple or duplicate recording of the same incident cancer case.

Duplicate records require the NCR to resolve 2 problems:

1. De-duplication: The identification of duplicates in order to exclude them from analysis. Manual and sophisticated record linkage techniques were employed to accomplish this
2. Assigning one value for the variables when reported values conflict with each other. This was undertaken by expert review of the data, with if necessary query at source to resolve inconsistencies. Otherwise, pre-determined rules were used for selecting a value.

De-duplication was performed using QualityStage software. NCR achieved de-duplication by applying methods such as string comparison, phonemic name comparison, fuzzy matching, specialised numeric comparisons and other user defined rules.

Rules for de-duplication

NCR developed rules for identifying duplicates of records within the system.

Order referred to strength of confidence (order 1 highest confidence) that a record is a duplicate of another. Order was determined by the probability weightage that was assigned for each duplicate record.

Order	Rules
1	Exact match on IC number (old or new)
2	Exact match on name and “similar” IC
3	Exact match on name and “similar” IC and “similar” age and “similar” gender and “similar” race
4	Phonetic match on name and “similar” name and “similar” IC and “similar” name and “similar” age and “similar” gender and “similar” race

Note: “Similar” indicates there is a slight variation among the duplicates found due to transcription error, transposition of character, misspelling, phonetic errors or absolute difference between two numbers.

For quality assurance purpose, a final clerical review was done to ensure that the records identified as duplicates were indeed true duplicates and that the records identified as unique were indeed true unique.

Rules for assigning a value among duplicates

The rules below were used to assign a value to duplicate records when they were inconsistent with another.

Variable	Rules
Age	Use median age among duplicates
Sex	Assign the gender status of the majority records. If evenly split (for example, 1 male and 1 female for 2 duplicates), randomly assign one of either sex
Race	Assign the modal ethnic category. If there are 2 or more modes, assign by human reviewer, else assign Malay first, then Chinese, then Indian and lastly Others
State	Assign to Sabah or Sarawak if any duplicate from Sabah or Sarawak. If both present among duplicates, assign either Sabah or Sarawak randomly. The assumption underlying this rule is that since Peninsular Malaysia is better developed medically, a case is more likely to be referred from Sabah/Sarawak to Peninsular Malaysia than vice versa.
Diagnostic basis	Assign in the following order of priority: Histology, Morphology, Clinical

Cancer diagnosis

Assign the diagnosis that requires more information to make, in the following order of priority:

- Records with specific site diagnosis
- Records with non-specific "Other" category
- Records with unknown primary site

Remaining duplicates with conflicting specific site diagnoses will be reviewed by human expert and a diagnosis assigned accordingly.

Active case finding and site monitoring

Active case finding and site monitoring were indicated for under-performing SDPs.

Database lock

The final data set for analysis is locked prior to transfer for analysis

Rules for excluding records from database (deleted) or from analysis are as follows:

- Prevalent cases. SDPs are also instructed not to report prevalent cases. Prevalent cases were also determined by performing record matching using QualityStage software against previous HMIS and NCR data.
- Non-cancers
- Benign tumours or tumour of uncertain behaviour
- Recurrent or residual tumour. Here we assume that tumour was diagnosed before year of reporting, and hence represents a prevalent case. This is conservative as tumour may well have recurred in the same year it was diagnosed.
- Tumour of uncertain diagnostic basis
- Expert Panel's decision to exclude a case, usually on ground of poor data quality or insufficient information to determine case status

Data Analysis

The statistical methods described below for the analysis of NCR cancer data followed standard practices [1]. Missing data on age and sex were imputed by "hot-decking". The hot deck imputation method implemented was the Approximate Bayesian Bootstrap Hotdeck. In this method, a sample was first obtained by bootstrap sampling from observations with complete data for the strata defined by cancer diagnosis and race, and donor lines are then selected again from this bootstrap sample again by bootstrap sampling.

Cancer incidence is defined as the number of cases first notified for a given population during a specified period.

The crude incidence rate (CR) is estimated as follows:

Incidence = $\frac{\text{Number of new cancer cases}}{\text{Population at risk}}$ in a period of time

$$CR = \frac{\sum_{i=1}^A r_i}{\sum_{i=1}^A n_i} \times 100000$$

where r_i is the number of cases which have occurred in the i th age class and n_i the person-years of observation in the i th age class during the same period of times as cases were counted.

The population at risk refers to Malaysian population as provided by Department of Statistics based on its projection. The period of interest is one calendar year (year 2003)

Age-standardized incidence (ASR) is required for meaningful comparison of 2 populations that differ in their age structure. For example, comparison of male and female, or one ethnic group and another, or one country and another.

The age-standardized incidence was calculated by the direct method, the reference population being the World Standard Population [2]

$$ASR = \frac{\sum_{i=1}^A a_i w_i}{\sum_{i=1}^A w_i}$$

where a_i is the age-specific rate in the i th age class and w_i is the weight from the Standard Population in the i th age class.

The Cumulative Risk (CumR) is the risk that an individual would have of developing the cancer in question during a certain age span if no other causes of death were in operation. This statistic is more readily understandable than age standardized rate as no arbitrary standard population is used. It can be considered as a directly age standardized rate with the same size of population in each age group. The CumR is estimated as follows:

The cumulative rate is estimated by the sum of over each year of age of the age-specific incidence, taken from birth to age 70+ for the 0-70+ rate.

$$\text{Cumulative rate} = \sum_{i=1}^A a_i t_i$$

where a_i is the age-specific incidence rate in the i th age class which is t_i years long.

The cumulative risk is estimated as follows:

$$\text{Cum. risk} = 100 \times [1 - \exp(-\text{cum. rate}/100)]$$

CHAPTER 1 CANCER INCIDENCE IN MALAYSIA 2003

1.1 Overall cancer incidence

Table 1.1.1: Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Malaysia 2003

	No.	%	CR	ASR	CumR
Peninsular					
<i>Sex</i>					
Male	9400	43.8	97.4	134.3	14.6
Female	12064	56.2	127.6	154.2	15.8
Both sexes	21464	100	112.3	143.2	15.1
Sabah					
Male	428	46.2	38.7	62.8	6.6
Female	498	53.8	46.6	76.2	7.9
Both sexes	926	100	42.6	69.0	7.2
Sarawak					
Male	645	47.6	59.5	78.9	8.8
Female	711	52.4	67.3	81.7	8.7
Both sexes	1356	100	63.3	79.9	8.7

Table 1.1.2: Cancer Incidence per 100,000 population (CR) by age and sex, Peninsular Malaysia 2003

Age, year	Male			Female		
	<i>No.</i>	%	<i>CR</i>	<i>No.</i>	%	<i>CR</i>
0-9	447	4.8	19.9	294	2.4	14
10-19	320	3.4	15.9	270	2.2	14
20-29	355	3.8	22.6	371	3.1	23.8
30-39	601	6.4	45.4	1217	10.1	90.8
40-49	1282	13.6	113.2	2795	23.2	249.1
50-59	1884	20.0	252.8	3047	25.3	426.7
60-69	2406	25.6	604.2	2380	19.7	573.9
70+	2105	22.4	964.7	1690	14.0	617.2

Table 1.1.3: Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003

Ethnic group	Male				Female			
	<i>No.</i>	<i>%</i>	<i>CR</i>	<i>ASR</i>	<i>No.</i>	<i>%</i>	<i>CR</i>	<i>ASR</i>
Malay	3587	40.8	60.6	90.1	4613	40.5	79	102.9
Chinese	4450	50.6	169.2	181.8	5481	48.1	217.7	206.5
Indian	755	8.6	85.7	130.7	1299	11.4	147.2	188.3

Table 1.1.4: Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003

		Age groups, year								
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	CumR
Male	Malay	19.7	15.5	19.2	32.2	81.5	178.6	377.9	571.9	10.1
	Chinese	15	12.3	24.9	68.9	157	335.4	822.8	1416.6	18.9
	Indian	21.7	11.5	23.6	26.5	90.2	213.6	647.6	1000	14.6
Female	Malay	15.1	12.1	23.6	70.5	180.2	305.7	329.8	304.8	10.7
	Chinese	9.4	14.9	24.7	118.6	344.3	542.1	803.5	923.5	20.6
	Indian	10.1	15.1	13	74.5	222.4	514.3	842.4	1000	19.9

Figure 1.2.1(a) Ten most frequent cancers in males, Peninsular Malaysia 2003

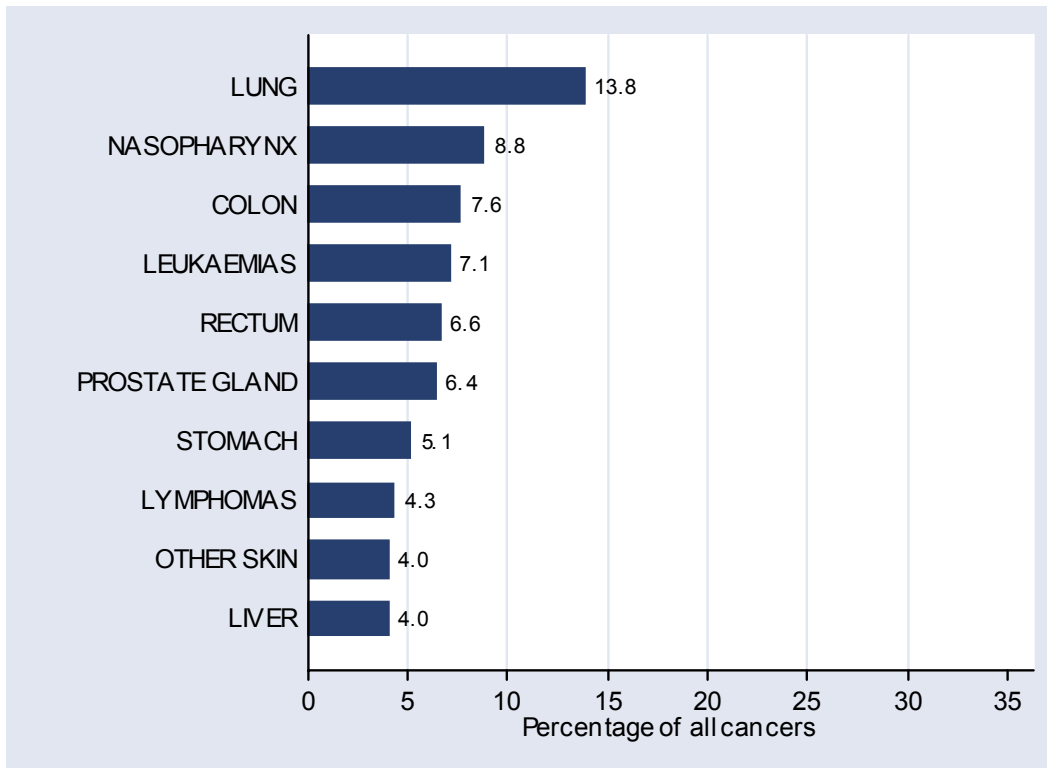
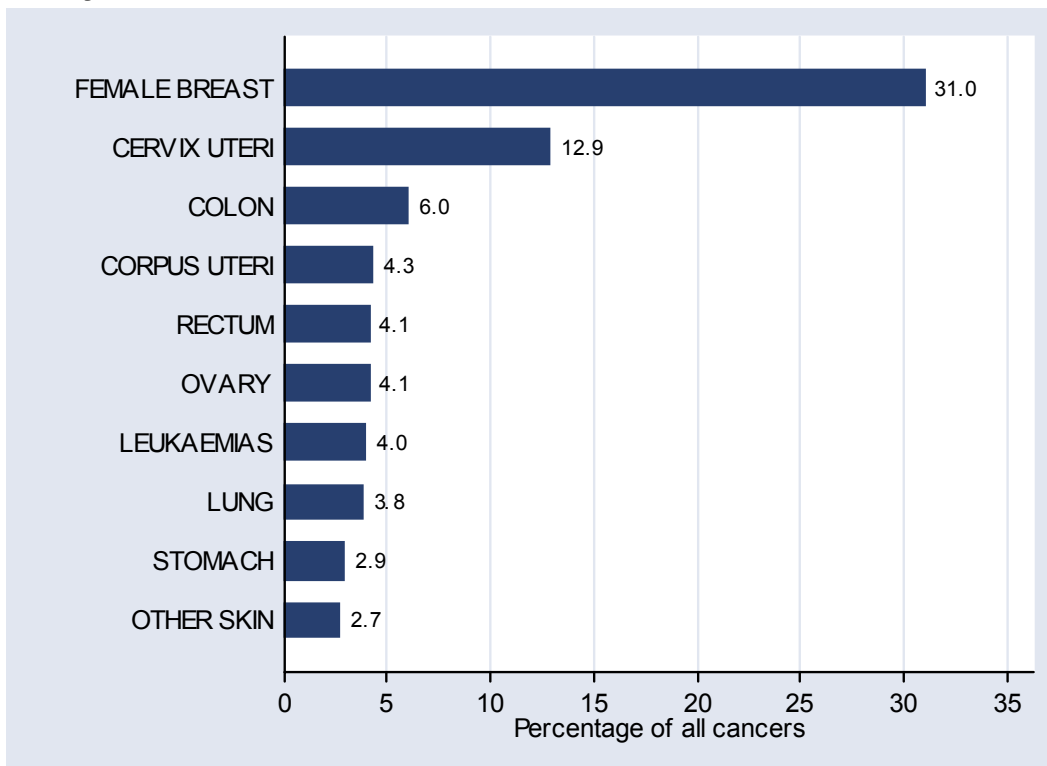


Figure 1.2.1(b) Ten most frequent cancers in females, Peninsular Malaysia 2003



1.2 Cancer Incidence by site

A. Sex differences in cancer incidence by site

Table 1.2.1: Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by site and sex, Peninsular Malaysia 2003

Male						Female					
Site	No.	%	CR	ASR	Cum R	Site	No.	%	CR	ASR	CumR
LUNG	1298	13.8	13.4	20.3	2.6	FEMALE BREAST	3738	31	39.5	46.2	4.9
NASOPHARYNX	825	8.8	8.5	10.2	1.1	CERVIX UTERI	1557	12.9	16.5	19.7	2.2
COLON	718	7.6	7.4	10.9	1.3	COLON	728	6	7.7	10	1.2
LEUKAEMIAS	663	7.1	6.9	7.2	0.6	CORPUS UTERI	524	4.3	5.5	6.9	0.8
RECTUM	617	6.6	6.4	9.9	1.1	OVARY	498	4.1	5.3	6.1	0.6
PROSTATE GLAND	602	6.4	6.2	10.3	1.3	RECTUM	489	4.1	5.2	6.8	0.8
STOMACH	476	5.1	4.9	7.2	0.9	LEUKAEMIAS	479	4	5.1	5.3	0.4
LYMPHOMAS	402	4.3	4.2	5.1	0.5	LUNG	460	3.8	4.9	6.5	0.8
OTHER SKIN **	380	4.0	3.9	5.9	0.7	STOMACH	350	2.9	3.7	4.8	0.6
LIVER	378	4	3.9	5.5	0.7	OTHER SKIN **	322	2.7	3.4	4.5	0.5
URINARY BLADDER	368	3.9	3.8	5.7	0.7	THYROID GLAND	321	2.7	3.4	3.8	0.4
BRAIN	226	2.4	2.3	2.6	0.3	NASOPHARYNX	300	2.5	3.2	3.6	0.4
LARYNX	206	2.2	2.1	3.2	0.4	LYMPHOMAS	240	2	2.5	3	0.3
KIDNEY	203	2.2	2.1	2.8	0.3	BRAIN	194	1.6	2.1	2.2	0.2
ESOPHAGUS	197	2.1	2.0	3.1	0.4	LIVER	152	1.3	1.6	2.1	0.3
CONNECTIVE TISSUES etc	133	1.4	1.4	1.6	0.1	GUM, MOUTH, OTHERS	148	1.2	1.6	2.1	0.3
TONGUE	125	1.3	1.3	1.8	0.2	CONNECTIVE TISSUES etc	115	1	1.2	1.4	0.1
THYROID GLAND	115	1.2	1.2	1.4	0.1	ESOPHAGUS	110	0.9	1.2	1.6	0.2
GUM, MOUTH, OTHERS	114	1.2	1.2	1.6	0.2	URINARY BLADDER	109	0.9	1.2	1.6	0.2
PANCREAS	113	1.2	1.2	1.7	0.2	KIDNEY	102	0.8	1.1	1.3	0.2
BONES etc	97	1	1	1	0.1	TONGUE	98	0.8	1	1.3	0.2
TESTIS	96	1	1	1.2	0.1	PANCREAS	81	0.7	0.9	1.1	0.1
SINONASAL	92	1	1	1.3	0.1	BONES etc	79	0.7	0.8	0.8	0.1
GALLBLADDER etc	81	0.9	0.8	1.2	0.1	GALLBLADDER etc	77	0.6	0.8	1.1	0.1
MYELOMAS	67	0.7	0.7	0.9	0.1	SALIVARY GLANDS	57	0.5	0.6	0.7	0.1
OROPHARYNX	62	0.7	0.6	0.9	0.1	MYELOMAS	48	0.4	0.5	0.7	0.1

Male					
Site	No.	%	CR	ASR	Cum R
SALIVARY GLANDS	61	0.6	0.6	0.8	0.1
SMALLER INTESTINE	57	0.6	0.6	0.8	0.1
OTHER PHARYNX	53	0.6	0.5	0.8	0.1
OTHER ENDOCRINE	48	0.5	0.5	0.5	0
OTHER DIGESTIVE ORGANS	45	0.5	0.5	0.7	0.1
HYPOPHARYNX	37	0.4	0.4	0.6	0.1
EYE	35	0.4	0.4	0.4	0
MELANOMAS	35	0.4	0.4	0.5	0
PENIS/ OTHER MALE GENITAL	27	0.3	0.3	0.4	0
ANUS	26	0.3	0.3	0.4	0
MALE BREAST	24	0.3	0.2	0.3	0
CRANIAL NERVES etc	23	0.2	0.2	0.2	0
LIP	17	0.2	0.2	0.3	0
THYMUS/HEART/MEDIASTI NUM	14	0.1	0.1	0.2	0
OTHER URINARY	9	0.1	0.1	0.1	0
PLEURA	8	0.1	0.1	0.1	0
OTHER RE *	6	0.1	0.1	0.1	0
UNKNOWN PRIMARY SITES	4	0	0	0.1	0

Female					
Site	No.	%	CR	ASR	CumR
SINONASAL	43	0.4	0.5	0.6	0.1
OTHER DIGESTIVE ORGANS	41	0.3	0.4	0.5	0.1
SMALLER INTESTINE	41	0.3	0.4	0.5	0.1
ANUS	40	0.3	0.4	0.6	0.1
VAGINA	36	0.3	0.4	0.5	0.1
OTHER ENDOCRINE	30	0.2	0.3	0.3	0
LARYNX	29	0.2	0.3	0.4	0
EYE	28	0.2	0.3	0.3	0
OTHER PHARYNX	25	0.2	0.3	0.3	0
CRANIAL NERVES etc	25	0.2	0.3	0.3	0
VULVA	22	0.2	0.2	0.3	0
OROPHARYNX	21	0.2	0.2	0.3	0
MELANOMAS	19	0.2	0.2	0.3	0
LIP	18	0.1	0.2	0.3	0
FALLOPIAN, LIGAMENT, ADNEXA	16	0.1	0.2	0.2	0
HYPOPHARYNX	15	0.1	0.2	0.2	0
PLACENTA	12	0.1	0.1	0.1	0
OTHER URINARY	11	0.1	0.1	0.2	0
PLEURA	9	0.1	0.1	0.1	0
THYMUS/HEART/MEDIASTI NUM	4	0	0	0	0
UNKNOWN PRIMARY SITES	3	0	0	0	0
OTHER RE *	1	0	0	0	0

Note:

* Other Reticuloendothelial System

** Ca skin other than Melanoma

B. Ethnic variation in cancer incidence by site

Table 1.2.2: Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by site ethnicity and sex, Peninsular Malaysia 2003

Malay Male						Malay Female					
Site	No.	%	CR	ASR	CumR	Site	No.	%	CR	ASR	CumR
LUNG	456	12.7	7.7	12.9	1.7	FEMALE BREAST	1534	33.3	26.3	33.9	3.5
LEUKAEMIAS	419	11.7	7.1	7.2	0.6	CERVIX UTERI	454	9.8	7.8	10.5	1.2
RECTUM	242	6.7	4.1	6.7	0.9	LEUKAEMIAS	298	6.5	5.1	5.3	0.4
LYMPHOMAS	227	6.3	3.8	5.2	0.6	OVARY	227	4.9	3.9	4.9	0.5
PROSTATE GLAND	214	6	3.6	7	0.9	COLON	219	4.7	3.8	5.3	0.7
NASOPHARYNX	203	5.7	3.4	4.8	0.5	CORPUS UTERI	212	4.6	3.6	5	0.6
COLON	201	5.6	3.4	5.6	0.7	THYROID GLAND	189	4.1	3.2	4	0.4
URINARY BLADDER	182	5.1	3.1	5.3	0.7	RECTUM	181	3.9	3.1	4.5	0.6
LIVER	128	3.6	2.2	3.4	0.4	LYMPHOMAS	126	2.7	2.2	2.7	0.3
OTHER SKIN **	126	3.5	2.1	3.6	0.4	LUNG	124	2.7	2.1	3.1	0.4
BRAIN	121	3.4	2	2.4	0.2	BRAIN	107	2.3	1.8	2	0.2
STOMACH	101	2.8	1.7	2.6	0.3	OTHER SKIN **	97	2.1	1.7	2.4	0.3
KIDNEY	78	2.2	1.3	1.9	0.2	NASOPHARYNX	71	1.5	1.2	1.5	0.1
CONNECTIVE TISSUES etc	75	2.1	1.3	1.6	0.1	CONNECTIVE TISSUES etc	62	1.3	1.1	1.2	0.1
LARYNX	59	1.6	1	1.7	0.2	STOMACH	53	1.1	0.9	1.3	0.2
THYROID GLAND	58	1.6	1	1.3	0.1	URINARY BLADDER	49	1.1	0.8	1.3	0.2
ESOPHAGUS	58	1.6	1	1.7	0.2	BONES etc	45	1	0.8	0.8	0.1
BONES etc	55	1.5	0.9	1	0.1	LIVER	42	0.9	0.7	1.1	0.1
TESTIS	48	1.3	0.8	1.1	0.1	KIDNEY	42	0.9	0.7	0.9	0.1
TONGUE	38	1.1	0.6	0.9	0.1	GALLBLADDER etc	33	0.7	0.6	0.8	0.1
SINONASAL	38	1.1	0.6	0.9	0.1	PANCREAS	33	0.7	0.6	0.8	0.1
PANCREAS	38	1.1	0.6	1	0.1	ESOPHAGUS	33	0.7	0.6	0.9	0.1
MYELOMAS	30	0.8	0.5	0.7	0.1	TONGUE	24	0.5	0.4	0.5	0
GUM, MOUTH, OTHERS	30	0.8	0.5	0.8	0.1	GUM, MOUTH, OTHERS	24	0.5	0.4	0.6	0.1
GALLBLADDER etc	29	0.8	0.5	0.8	0.1	SALIVARY GLANDS	24	0.5	0.4	0.5	0
OTHER ENDOCRINE	28	0.8	0.5	0.5	0	EYE	21	0.5	0.4	0.3	0
SALIVARY GLANDS	27	0.8	0.5	0.7	0.1	SMALLER INTESTINE	20	0.4	0.3	0.5	0.1

Malay Male					
Site	No.	%	CR	ASR	CumR
OTHER PHARYNX	27	0.8	0.5	0.8	0.1
EYE	24	0.7	0.4	0.4	0
SMALLER INTESTINE	23	0.6	0.4	0.6	0.1
OROPHARYNX	19	0.5	0.3	0.5	0.1
MELANOMAS	18	0.5	0.3	0.5	0
OTHER DIGESTIVE ORGANS	16	0.4	0.3	0.5	0
HYPOPHARYNX	15	0.4	0.3	0.4	0.1
CRANIAL NERVES etc	15	0.4	0.3	0.3	0
PENIS/ OTHER MALE GENITAL	10	0.3	0.2	0.2	0
ANUS	8	0.2	0.1	0.3	0
MALE BREAST	7	0.2	0.1	0.2	0
LIP	6	0.2	0.1	0.2	0
THYMUS/HEART/MEDIASTINUM	3	0.1	0.1	0.1	0
PLEURA	3	0.1	0.1	0.1	0
UNKNOWN PRIMARY SITES	2	0.1	0	0	0
OTHER RE *	2	0.1	0	0	0

Malay Female					
Site	No.	%	CR	ASR	CumR
OTHER ENDOCRINE	20	0.4	0.3	0.3	0
OTHER DIGESTIVE ORGANS	19	0.4	0.3	0.5	0.1
SINONASAL	17	0.4	0.3	0.4	0
MYELOMAS	17	0.4	0.3	0.4	0.1
ANUS	14	0.3	0.2	0.3	0
VAGINA	12	0.3	0.2	0.3	0
OTHER PHARYNX	12	0.3	0.2	0.3	0
CRANIAL NERVES etc	11	0.2	0.2	0.3	0
VULVA	9	0.2	0.2	0.2	0
OROPHARYNX	9	0.2	0.2	0.2	0
PLACENTA	8	0.2	0.1	0.1	0
LARYNX	8	0.2	0.1	0.2	0
FALLOPIAN, LIGAMENT, ADNEXA	7	0.2	0.1	0.1	0
MELANOMAS	6	0.1	0.1	0.1	0
LIP	4	0.1	0.1	0.1	0
THYMUS/HEART/MEDIASTINUM	4	0.1	0.1	0.1	0
HYPOPHARYNX	2	0	0	0.1	0
UNKNOWN PRIMARY SITES	2	0	0	0	0
OTHER URINARY	1	0	0	0	0
OTHER RE *	1	0	0	0	0
PLEURA	1	0	0	0	0

Note:

* Other Reticuloendothelial System

** Ca skin other than Melanoma

Chinese Male					
Site	No.	%	CR	ASR	Cum R
LUNG	738	16.6	28.1	31.5	4
NASOPHARYNX	516	11.6	19.6	18.1	1.9
COLON	451	10.1	17.2	19	2.2
RECTUM	300	6.7	11.4	12.5	1.4
PROSTATE GLAND	284	6.4	10.8	13	1.5
STOMACH	280	6.3	10.6	11.9	1.5
LIVER	214	4.8	8.1	8.5	0.9
OTHER SKIN **	182	4.1	6.9	7.7	0.7
LEUKAEMIAS	156	3.5	5.9	6.2	0.6
URINARY BLADDER	140	3.1	5.3	6	0.6
LYMPHOMAS	111	2.5	4.2	4.3	0.4
KIDNEY	107	2.4	4.1	4.3	0.5
LARYNX	101	2.3	3.8	4.2	0.5
ESOPHAGUS	89	2	3.4	3.9	0.5
BRAIN	71	1.6	2.7	2.7	0.3
PANCREAS	59	1.3	2.2	2.4	0.3
TONGUE	44	1	1.7	1.7	0.2
GALLBLADDER etc	43	1	1.6	1.7	0.2
SINONASAL	41	0.9	1.6	1.6	0.2
CONNECTIVE TISSUES etc	41	0.9	1.6	1.6	0.1
THYROID GLAND	36	0.8	1.4	1.3	0.1
GUM, MOUTH, OTHERS	32	0.7	1.2	1.3	0.2
TESTIS	29	0.7	1.1	1.1	0.1
SALIVARY GLANDS	29	0.7	1.1	1.2	0.1
BONES etc	27	0.6	1	1	0.1
OROPHARYNX	26	0.6	1	1	0.1
SMALLER INTESTINE	26	0.6	1	1	0.1
MYELOMAS	23	0.5	0.9	0.9	0.1
OTHER DIGESTIVE ORGANS	20	0.4	0.8	0.8	0.1

Chinese Female					
Site	No.	%	CR	AS R	Cum R
FEMALE BREAST	1631	29.8	64.8	59.7	6.3
CERVIX UTERI	782	14.3	31.1	28.8	3.1
COLON	443	8.1	17.6	17.1	2
LUNG	292	5.3	11.6	11.4	1.4
RECTUM	263	4.8	10.4	10.2	1.2
STOMACH	228	4.2	9.1	8.7	1
CORPUS UTERI	221	4	8.8	8.3	0.9
NASOPHARYNX	201	3.7	8	7.4	0.8
OVARY	190	3.5	7.5	7.1	0.8
OTHER SKIN **	179	3.3	7.1	6.9	0.8
LEUKAEMIAS	115	2.1	4.6	4.5	0.4
THYROID GLAND	97	1.8	3.9	3.6	0.4
LIVER	89	1.6	3.5	3.6	0.4
LYMPHOMAS	87	1.6	3.5	3.4	0.4
BRAIN	59	1.1	2.3	2.4	0.2
URINARY BLADDER	49	0.9	1.9	1.9	0.2
KIDNEY	46	0.8	1.8	1.8	0.2
CONNECTIVE TISSUES etc	40	0.7	1.6	1.6	0.1
PANCREAS	38	0.7	1.5	1.4	0.1
GALLBLADDER etc	33	0.6	1.3	1.3	0.2
ESOPHAGUS	24	0.4	1	0.9	0.1
ANUS	24	0.4	1	0.9	0.1
MYELOMAS	23	0.4	0.9	0.9	0.1
TONGUE	22	0.4	0.9	0.9	0.1
SINONASAL	22	0.4	0.9	0.8	0.1
BONES etc	18	0.3	0.7	0.7	0.1
GUM, MOUTH, OTHERS	17	0.3	0.7	0.6	0.1
SMALLER INTESTINE	17	0.3	0.7	0.7	0.1
VAGINA	17	0.3	0.7	0.7	0.1

Chinese Male					
Site	No.	%	CR	ASR	Cum R
OTHER PHARYNX	17	0.4	0.6	0.6	0.1
ANUS	16	0.4	0.6	0.7	0.1
MELANOMAS	12	0.3	0.5	0.4	0.1
PENIS/ OTHER MALE GENITAL	11	0.2	0.4	0.4	0.1
OTHER ENDOCRINE	11	0.2	0.4	0.4	0
MALE BREAST	11	0.2	0.4	0.4	0
THYMUS/HEART/MEDIASTINUM	9	0.2	0.3	0.4	0.1
CRANIAL NERVES etc	8	0.2	0.3	0.3	0
OTHER URINARY	7	0.2	0.3	0.3	0
HYPOPHARYNX	7	0.2	0.3	0.3	0
LIP	5	0.1	0.2	0.2	0
EYE	5	0.1	0.2	0.2	0
PLEURA	4	0.1	0.2	0.2	0
OTHER RE *	3	0.1	0.1	0.1	0
UNKNOWN PRIMARY SITES	2	0	0.1	0.1	0

Chinese Female					
Site	No.	%	CR	AS R	Cum R
SALIVARY GLANDS	17	0.3	0.7	0.6	0.1
OTHER DIGESTIVE ORGANS	16	0.3	0.6	0.6	0
CRANIAL NERVES etc	12	0.2	0.5	0.5	0.1
LARYNX	12	0.2	0.5	0.5	0.1
VULVA	10	0.2	0.4	0.4	0.1
MELANOMAS	9	0.2	0.4	0.4	0
OTHER URINARY FALLOPIAN, LIGAMENT, ADNEXA	9	0.2	0.4	0.3	0.1
OTHER PHARYNX	8	0.1	0.3	0.3	0
OTHER PHARYNX	7	0.1	0.3	0.3	0
PLEURA	7	0.1	0.3	0.3	0
OROPHARYNX	4	0.1	0.2	0.1	0
EYE	4	0.1	0.2	0.2	0
OTHER ENDOCRINE	4	0.1	0.2	0.1	0
LIP	3	0.1	0.1	0.1	0
HYPOPHARYNX	2	0	0.1	0.1	0
PLACENTA	2	0	0.1	0.1	0
UNKNOWN PRIMARY SITES	1	0	0	0	0

Note:

* Other Reticuloendothelial System

** Ca skin other than Melanoma

Indian Male						Indian Female					
Site	No.	%	CR	ASR	Cum R	Site	No.	%	CR	AS R	Cu mR
STOMACH	70	9.3	7.9	12.9	1.2	FEMALE BREAST	410	31.6	46.4	55.8	6.3
PROSTATE GLAND	67	8.9	7.6	14	1.7	CERVIX UTERI	150	11.5	17	22.4	2.8
LEUKAEMIAS	61	8.1	6.9	7.9	0.6	GUM, MOUTH, OTHERS	100	7.7	11.3	16.5	2.3
LUNG	54	7.2	6.1	11.1	1.5	CORPUS UTERI	64	4.9	7.3	9.5	1.2
LYMPHOMAS	42	5.6	4.8	5.1	0.6	STOMACH	53	4.1	6	7.9	1
GUM, MOUTH, OTHERS	39	5.2	4.4	7.2	1	OVARY	48	3.7	5.4	6.7	0.7
RECTUM	38	5	4.3	6.8	0.8	ESOPHAGUS	46	3.5	5.2	7.3	0.9
ESOPHAGUS	37	4.9	4.2	6.1	0.6	LEUKAEMIAS	46	3.5	5.2	5.8	0.5
TONGUE	33	4.4	3.7	6.4	0.8	TONGUE	40	3.1	4.5	6.8	0.8
COLON	30	4	3.4	5.5	0.7	COLON	37	2.8	4.2	5.4	0.5
LARYNX	25	3.3	2.8	4.7	0.6	RECTUM	30	2.3	3.4	4.6	0.5
URINARY BLADDER	24	3.2	2.7	4.8	0.7	LUNG	29	2.2	3.3	4.4	0.6
OTHER SKIN **	18	2.4	2	3.2	0.4	THYROID GLAND	24	1.8	2.7	2.8	0.2
LIVER	18	2.4	2	3.1	0.5	OTHER SKIN **	17	1.3	1.9	2.6	0.3
OROPHARYNX	16	2.1	1.8	3.1	0.4	LIVER	14	1.1	1.6	2	0.2
BRAIN	16	2.1	1.8	2.3	0.3	BRAIN	13	1	1.5	1.6	0.2
NASOPHARYNX	16	2.1	1.8	2.6	0.3	LYMPHOMAS	12	0.9	1.4	1.3	0.1
HYPOPHARYNX	15	2	1.7	3.1	0.5	BONES etc	10	0.8	1.1	1.4	0.1
THYROID GLAND	14	1.9	1.6	2	0.2	KIDNEY	10	0.8	1.1	1.4	0.2
KIDNEY	13	1.7	1.5	2.1	0.3	LIP	10	0.8	1.1	1.8	0.3
CONNECTIVE TISSUES etc	11	1.5	1.2	1.8	0.2	HYPOPHARYNX	9	0.7	1	1.5	0.2
TESTIS	11	1.5	1.2	1.2	0.1	PANCREAS	9	0.7	1	1.6	0.2
MYELOMAS	10	1.3	1.1	2	0.4	CONNECTIVE TISSUES etc	9	0.7	1	1.3	0.1
PANCREAS	8	1.1	0.9	1.3	0.1	SALIVARY GLANDS	8	0.6	0.9	1	0.1
SINONASAL	5	0.7	0.6	0.7	0	GALLBLADDER etc	8	0.6	0.9	1.3	0.1
BONES etc	5	0.7	0.6	0.5	0	OROPHARYNX	7	0.5	0.8	1.1	0.1

OTHER ENDOCRINE	5	0.7	0.6	0.8	0.1
GALLBLADDER etc	5	0.7	0.6	0.8	0.1
SMALLER INTESTINE	5	0.7	0.6	0.7	0.1
MALE BREAST	5	0.7	0.6	0.7	0
OTHER DIGESTIVE ORGANS	5	0.7	0.6	0.8	0.1
OTHER PHARYNX	4	0.5	0.5	0.5	0
LIP	3	0.4	0.3	0.6	0.1
OTHER URINARY	2	0.3	0.2	0.4	0.1
MELANOMAS	2	0.3	0.2	0.4	0
SALIVARY GLANDS	2	0.3	0.2	0.2	0
EYE	2	0.3	0.2	0.3	0
THYMUS/HEART/MEDIASTINUM	1	0.1	0.1	0.1	0
PENIS/ OTHER MALE GENITAL	1	0.1	0.1	0.1	0
PLEURA	1	0.1	0.1	0.1	0

LARYNX	7	0.5	0.8	1.2	0.1
OTHER DIGESTIVE ORGANS	6	0.5	0.7	1	0.1
VAGINA	6	0.5	0.7	0.8	0.1
URINARY BLADDER	6	0.5	0.7	1	0.1
MYELOMAS	5	0.4	0.6	0.8	0.1
OTHER ENDOCRINE	5	0.4	0.6	0.5	0
NASOPHARYNX	5	0.4	0.6	0.8	0.1
MELANOMAS	3	0.2	0.3	0.4	0
SINONASAL	3	0.2	0.3	0.5	0.1
OTHER PHARYNX	3	0.2	0.3	0.4	0.1
EYE	3	0.2	0.3	0.4	0
VULVA	2	0.2	0.2	0.3	0
SMALLER INTESTINE	2	0.2	0.2	0.3	0
CRANIAL NERVES etc	2	0.2	0.2	0.2	0
ANUS	1	0.1	0.1	0.2	0
OTHER URINARY	1	0.1	0.1	0.2	0
PLEURA	1	0.1	0.1	0.2	0
FALLOPIAN, LIGAMENT, ADNEXA	1	0.1	0.1	0.1	0
PLACENTA	1	0.1	0.1	0.2	0

Note:

* Other Reticuloendothelial System

** Ca skin other than Melanoma

Figure 1.2.2(a): Ten most frequent cancers in males by ethnic groups, Peninsular Malaysia 2003

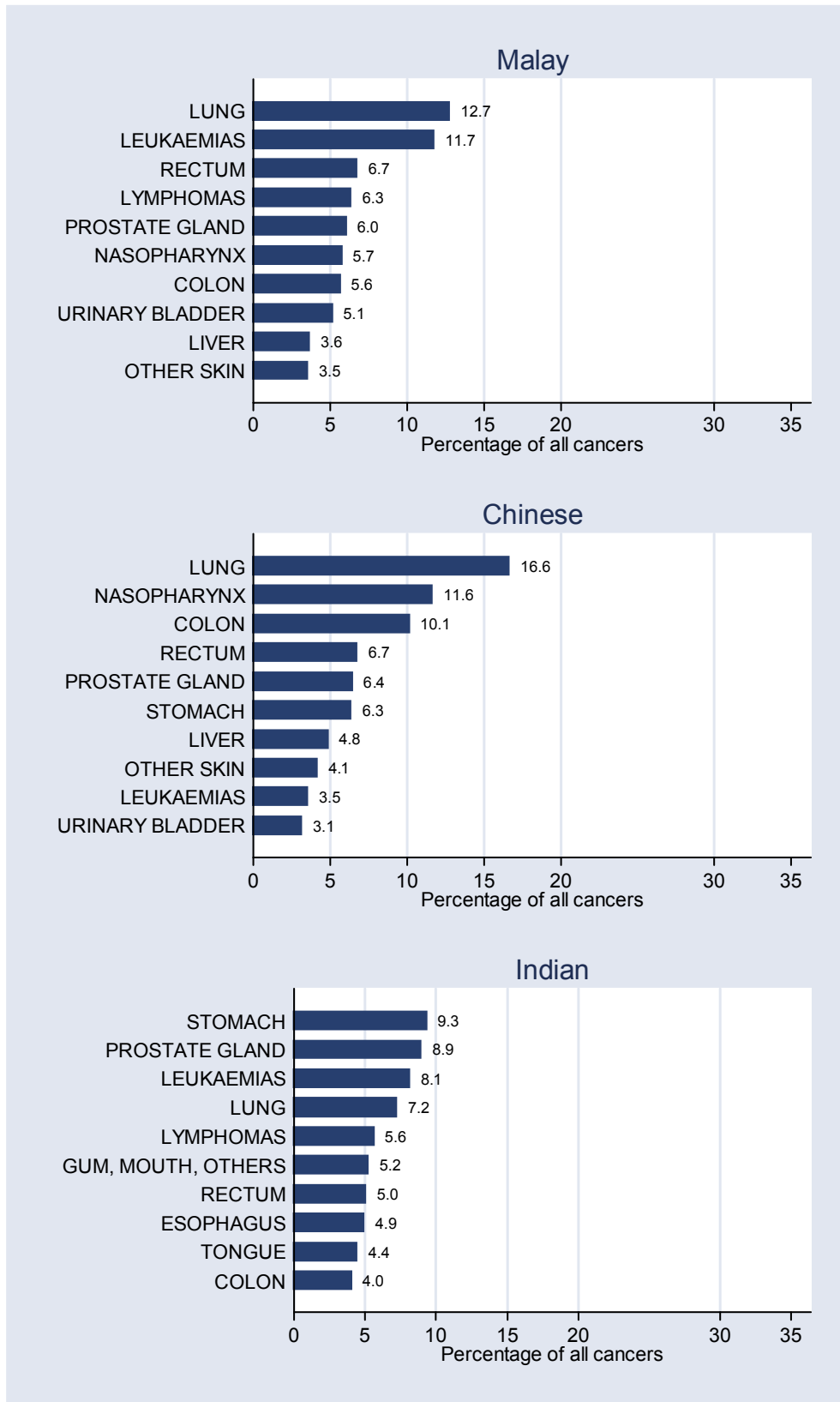
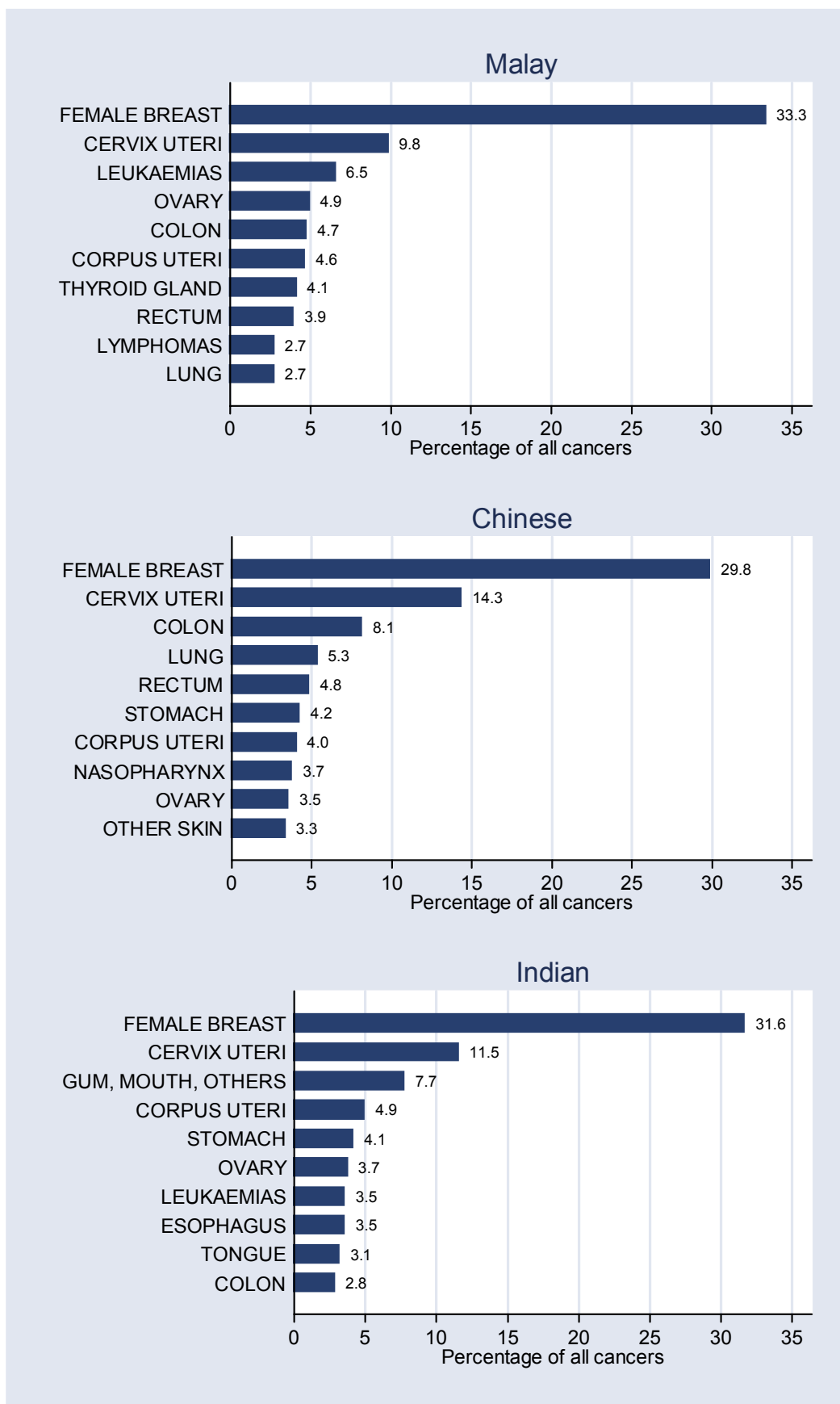


Figure 1.2.2(b): Ten most frequent cancers in females by ethnic groups, Peninsular Malaysia 2003



C. Age variation in cancer incidence by site

Table 1.2.3: Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by site age and sex, Peninsular Malaysia 2003

Male, Age 0-14				Female, Age 0-14			
Site	No.	%	CR	Site	No.	%	CR
LEUKAEMIAS	312	50.3	9.5	LEUKAEMIAS	197	45.2	6.4
BRAIN	55	8.9	1.7	BRAIN	49	11.2	1.6
LYMPHOMAS	38	6.1	1.2	CONNECTIVE TISSUES etc	21	4.8	0.7
KIDNEY	27	4.4	0.8	EYE	19	4.4	0.6
CONNECTIVE TISSUES etc	26	4.2	0.8	LYMPHOMAS	19	4.4	0.6
EYE	22	3.5	0.7	KIDNEY	17	3.9	0.6
BONES etc	20	3.2	0.6	BONES etc	17	3.9	0.6
OTHER ENDOCRINE	17	2.7	0.5	OTHER ENDOCRINE	16	3.7	0.5
TESTIS	13	2.1	0.4	OVARY	13	3.0	0.4
NASOPHARYNX	10	1.6	0.3	THYROID GLAND	8	1.8	0.3
LIVER	9	1.5	0.3	LIVER	7	1.6	0.2
LUNG	9	1.5	0.3	URINARY BLADDER	6	1.4	0.2
URINARY BLADDER	7	1.1	0.2	NASOPHARYNX	5	1.1	0.2
MYELOMAS	6	1	0.2	OTHER SKIN **	4	0.9	0.1
PROSTATE GLAND	5	0.8	0.2	MYELOMAS	4	0.9	0.1
COLON	5	0.8	0.2	COLON	3	0.7	0.1
SINONASAL	4	0.6	0.1	STOMACH	3	0.7	0.1
CRANIAL NERVES etc	3	0.5	0.1	OTHER PHARYNX	3	0.7	0.1
THYROID GLAND	3	0.5	0.1	FEMALE BREAST	3	0.7	0.1
SALIVARY GLANDS	2	0.3	0.1	CERVIX UTERI	3	0.7	0.1
STOMACH	2	0.3	0.1	LUNG	2	0.5	0.1
GUM, MOUTH, OTHERS	2	0.3	0.1	OTHER DIGESTIVE ORGANS	2	0.5	0.1
OTHER RE *	2	0.3	0.1	SALIVARY GLANDS	2	0.5	0.1
OTHER SKIN **	2	0.3	0.1	THYMUS/HEART/MEDIASTINUM	2	0.5	0.1
SMALLER INTESTINE	2	0.3	0.1	PANCREAS	2	0.5	0.1

Male, Age 0-14			
Site	No.	%	CR
OTHER DIGESTIVE ORGANS	2	0.3	0.1
LARYNX	2	0.3	0.1
PANCREAS	2	0.3	0.1
MELANOMAS	1	0.2	0
RECTUM	1	0.2	0
MALE BREAST	1	0.2	0

Female, Age 0-14			
Site	No.	%	CR
GUM, MOUTH, OTHERS	1	0.2	0
LARYNX	1	0.2	0
OTHER RE *	1	0.2	0
OTHER URINARY	1	0.2	0
CORPUS UTERI	1	0.2	0
ANUS	1	0.2	0

Male, Age 15-49				Female, Age 15-49			
Site	No.	%	CR	Site	No.	%	CR
NASOPHARYNX	423	17.7	8.4	FEMALE BREAST	1755	38.9	35.3
LEUKAEMIAS	223	9.4	4.4	CERVIX UTERI	663	14.7	13.4
LYMPHOMAS	176	7.4	3.5	OVARY	240	5.3	4.8
LUNG	173	7.3	3.5	CORPUS UTERI	179	4	3.6
COLON	138	5.8	2.8	THYROID GLAND	173	3.8	3.3
RECTUM	120	5	2.4	LEUKAEMIAS	167	3.7	3.4
BRAIN	106	4.4	2.1	COLON	160	3.5	3.2
STOMACH	99	4.2	2	NASOPHARYNX	151	3.3	3
LIVER	85	3.6	1.7	RECTUM	109	2.4	2.2
OTHER SKIN **	73	3.1	1.5	LYMPHOMAS	102	2.3	2.1
THYROID GLAND	59	2.5	1.2	BRAIN	91	2	1.8
CONNECTIVE TISSUES etc	58	2.4	1.2	LUNG	86	1.9	1.7
BONES etc	56	2.3	1.1	STOMACH	78	1.7	1.6
TESTIS	50	2.1	1	OTHER SKIN **	58	1.3	1.2
URINARY BLADDER	43	1.8	0.9	CONNECTIVE TISSUES etc	51	1.1	1
KIDNEY	38	1.6	0.8	BONES etc	47	1	0.9
ESOPHAGUS	37	1.6	0.7	TONGUE	30	0.7	0.6
GUM, MOUTH, OTHERS	36	1.5	0.7	LIVER	28	0.6	0.6
TONGUE	34	1.4	0.7	SALIVARY GLANDS	25	0.6	0.5
SINONASAL	28	1.2	0.6	GUM, MOUTH, OTHERS	23	0.5	0.5
LARYNX	28	1.2	0.6	KIDNEY	23	0.5	0.5
SALIVARY GLANDS	26	1.1	0.5	ESOPHAGUS	20	0.4	0.4
OTHER ENDOCRINE	21	0.9	0.4	PANCREAS	18	0.4	0.4
SMALLER INTESTINE	18	0.8	0.4	GALLBLADDER etc	18	0.4	0.4
PROSTATE GLAND	18	0.8	0.4	SINONASAL	13	0.3	0.3
CRANIAL NERVES etc	17	0.7	0.3	SMALLER INTESTINE	13	0.3	0.3
GALLBLADDER etc	15	0.6	0.3	URINARY BLADDER	12	0.3	0.2
OTHER PHARYNX	15	0.6	0.3	OTHER ENDOCRINE	12	0.3	0.2
PANCREAS	13	0.5	0.3	CRANIAL NERVES etc	11	0.2	0.2

Male, Age 15-49			
Site	No.	%	CR
PENIS/ OTHER MALE GENITAL	12	0.5	0.2
MYELOMAS	12	0.5	0.2
OTHER DIGESTIVE ORGANS	12	0.5	0.2
OROPHARYNX	9	0.4	0.2
EYE	9	0.4	0.2
THYMUS/HEART/MEDIASTINUM	7	0.3	0.1
MELANOMAS	7	0.3	0.1
HYPOPHARYNX	6	0.3	0.1
MALE BREAST	6	0.3	0.1
ANUS	5	0.2	0.1
PLEURA	4	0.2	0.1
UNKNOWN PRIMARY SITES	2	0.1	0
OTHER RE *	2	0.1	0
OTHER URINARY	1	0	0

Female, Age 15-49			
Site	No.	%	CR
VAGINA	10	0.2	0.2
MYELOMAS	10	0.2	0.2
OTHER DIGESTIVE ORGANS	9	0.2	0.2
OROPHARYNX	8	0.2	0.2
PLACENTA	8	0.2	0.2
EYE	8	0.2	0.2
FALLOPIAN, LIGAMENT, ADNEXA	7	0.2	0.1
MELANOMAS	6	0.1	0.1
OTHER PHARYNX	5	0.1	0.1
HYPOPHARYNX	5	0.1	0.1
ANUS	5	0.1	0.1
VULVA	4	0.1	0.1
LIP	3	0.1	0.1
OTHER URINARY	2	0	0
LARYNX	2	0	0
PLEURA	2	0	0
THYMUS/HEART/MEDIASTINUM	1	0	0
UNKNOWN PRIMARY SITES	1	0	0

Male, Age 50-69				Female, Age 50-69			
Site	No.	%	CR	Site	No.	%	CR
LUNG	756	17.6	66.1	FEMALE BREAST	1712	31.5	151.7
COLON	362	8.4	31.7	CERVIX UTERI	710	13.1	62.9
RECTUM	346	8.1	30.3	COLON	365	6.7	32.3
NASOPHARYNX	343	8	30	CORPUS UTERI	291	5.4	25.8
PROSTATE GLAND	278	6.5	24.3	LUNG	253	4.7	22.4
STOMACH	239	5.6	20.9	RECTUM	248	4.6	22
LIVER	215	5	18.8	OVARY	211	3.9	18.7
URINARY BLADDER	180	4.2	15.7	STOMACH	156	2.9	13.8
OTHER SKIN **	172	4.0	15	OTHER SKIN **	145	2.7	12.8
LYMPHOMAS	137	3.2	12	NASOPHARYNX	127	2.3	11.3
LARYNX	118	2.8	10.3	THYROID GLAND	106	2	9.4
KIDNEY	108	2.5	9.4	GUM, MOUTH, OTHERS	91	1.7	8.1
ESOPHAGUS	103	2.4	9	LEUKAEMIAS	89	1.6	7.9
LEUKAEMIAS	97	2.3	8.5	LYMPHOMAS	88	1.6	7.8
PANCREAS	67	1.6	5.9	LIVER	85	1.6	7.5
TONGUE	65	1.5	5.7	ESOPHAGUS	60	1.1	5.3
GUM, MOUTH, OTHERS	56	1.3	4.9	URINARY BLADDER	53	1	4.7
BRAIN	53	1.2	4.6	TONGUE	47	0.9	4.2
GALLBLADDER etc	51	1.2	4.5	BRAIN	46	0.8	4.1
THYROID GLAND	44	1	3.8	KIDNEY	44	0.8	3.9
OROPHARYNX	40	0.9	3.5	GALLBLADDER etc	40	0.7	3.5
SINONASAL	39	0.9	3.4	PANCREAS	38	0.7	3.4
MYELOMAS	38	0.9	3.3	CONNECTIVE TISSUES etc	32	0.6	2.8
CONNECTIVE TISSUES etc	33	0.8	2.9	MYELOMAS	29	0.5	2.6
OTHER PHARYNX	30	0.7	2.6	SALIVARY GLANDS	25	0.5	2.2
SMALLER INTESTINE	26	0.6	2.3	SMALLER INTESTINE	23	0.4	2
OTHER DIGESTIVE ORGANS	23	0.5	2	SINONASAL	22	0.4	1.9
SALIVARY GLANDS	21	0.5	1.8	OTHER DIGESTIVE ORGANS	20	0.4	1.8
TESTIS	19	0.4	1.7	ANUS	20	0.4	1.8

Male, Age 50-69			
Site	No.	%	CR
HYPOPHARYNX	19	0.4	1.7
MELANOMAS	18	0.4	1.6
MALE BREAST	15	0.3	1.3
LIP	15	0.3	1.3
BONES etc	14	0.3	1.2
ANUS	10	0.2	0.9
PENIS/ OTHER MALE GENITAL	8	0.2	0.7
OTHER ENDOCRINE	8	0.2	0.7
OTHER URINARY	7	0.2	0.6
THYMUS/HEART/MEDIASTINUM	6	0.1	0.5
EYE	3	0.1	0.3
PLEURA	3	0.1	0.3
CRANIAL NERVES etc	2	0	0.2
UNKNOWN PRIMARY SITES	1	0	0.1
OTHER RE *	1	0	0.1

Female, Age 50-69			
Site	No.	%	CR
VAGINA	19	0.4	1.7
LARYNX	15	0.3	1.3
OTHER PHARYNX	13	0.2	1.2
BONES etc	12	0.2	1.1
CRANIAL NERVES etc	12	0.2	1.1
VULVA	12	0.2	1.1
LIP	11	0.2	1
MELANOMAS	10	0.2	0.9
FALLOPIAN, LIGAMENT, ADNEXA	8	0.1	0.7
HYPOPHARYNX	8	0.1	0.7
OROPHARYNX	6	0.1	0.5
PLEURA	5	0.1	0.4
OTHER URINARY	5	0.1	0.4
PLACENTA	4	0.1	0.4
OTHER ENDOCRINE	2	0	0.2
EYE	1	0	0.1
UNKNOWN PRIMARY SITES	1	0	0.1

Male, Age 70+				Female, Age 70+			
Site	No.	%	CR	Site	No.	%	CR
LUNG	360	17.1	165	FEMALE BREAST	268	15.9	97.9
PROSTATE GLAND	301	14.3	137.9	COLON	200	11.8	73
COLON	213	10.1	97.6	CERVIX UTERI	181	10.7	66.1
RECTUM	150	7.1	68.7	RECTUM	132	7.8	48.2
URINARY BLADDER	138	6.6	63.2	LUNG	119	7	43.5
STOMACH	136	6.5	62.3	OTHER SKIN **	115	6.8	42
OTHER SKIN **	133	6.3	61	STOMACH	113	6.7	41.3
LIVER	69	3.3	31.6	CORPUS UTERI	53	3.1	19.4
LARYNX	58	2.8	26.6	URINARY BLADDER	38	2.2	13.9
ESOPHAGUS	57	2.7	26.1	OVARY	34	2	12.4
LYMPHOMAS	51	2.4	23.4	THYROID GLAND	34	2	12.4
NASOPHARYNX	49	2.3	22.5	GUM, MOUTH, OTHERS	33	2	12.1
LEUKAEMIAS	31	1.5	14.2	LIVER	32	1.9	11.7
PANCREAS	31	1.5	14.2	LYMPHOMAS	31	1.8	11.3
KIDNEY	30	1.4	13.7	ESOPHAGUS	30	1.8	11
TONGUE	26	1.2	11.9	LEUKAEMIAS	26	1.5	9.5
SINONASAL	21	1	9.6	PANCREAS	23	1.4	8.4
GUM, MOUTH, OTHERS	20	1	9.2	TONGUE	21	1.2	7.7
CONNECTIVE TISSUES etc	16	0.8	7.3	GALLBLADDER etc	19	1.1	6.9
GALLBLADDER etc	15	0.7	6.9	KIDNEY	18	1.1	6.6
TESTIS	14	0.7	6.4	NASOPHARYNX	17	1	6.2
OROPHARYNX	13	0.6	6	ANUS	14	0.8	5.1
SALIVARY GLANDS	12	0.6	5.5	LARYNX	11	0.7	4
HYPOPHARYNX	12	0.6	5.5	CONNECTIVE TISSUES etc	11	0.7	4
BRAIN	12	0.6	5.5	OTHER DIGESTIVE ORGANS	10	0.6	3.7
ANUS	11	0.5	5	BRAIN	8	0.5	2.9
MYELOMAS	11	0.5	5	SINONASAL	8	0.5	2.9
SMALLER INTESTINE	11	0.5	5	VAGINA	7	0.4	2.6
THYROID GLAND	9	0.4	4.1	OROPHARYNX	7	0.4	2.6

Male, Age 70+			
Site	No.	%	CR
MELANOMAS	9	0.4	4.1
OTHER DIGESTIVE ORGANS	8	0.4	3.7
OTHER PHARYNX	8	0.4	3.7
BONES etc	7	0.3	3.2
PENIS/ OTHER MALE GENITAL	7	0.3	3.2
LIP	2	0.1	0.9
MALE BREAST	2	0.1	0.9
OTHER ENDOCRINE	2	0.1	0.9
PLEURA	1	0	0.5
OTHER URINARY	1	0	0.5
EYE	1	0	0.5
CRANIAL NERVES etc	1	0	0.5
THYMUS/HEART/MEDIASTINUM	1	0	0.5
UNKNOWN PRIMARY SITES	1	0	0.5
OTHER RE *	1	0	0.5

Female, Age 70+			
Site	No.	%	CR
VULVA	6	0.4	2.2
MYELOMAS	5	0.3	1.8
SMALLER INTESTINE	5	0.3	1.8
SALIVARY GLANDS	5	0.3	1.8
OTHER PHARYNX	4	0.2	1.5
LIP	4	0.2	1.5
OTHER URINARY	3	0.2	1.1
MELANOMAS	3	0.2	1.1
BONES etc	3	0.2	1.1
CRANIAL NERVES etc	2	0.1	0.7
HYPOPHARYNX	2	0.1	0.7
PLEURA	2	0.1	0.7
THYMUS/HEART/MEDIASTINUM	1	0.1	0.4
UNKNOWN PRIMARY SITES	1	0.1	0.4
FALLOPIAN, LIGAMENT, ADNEXA	1	0.1	0.4

Note:

* Other Reticuloendothelial System

** Ca skin other than Melanoma

Figure 1.2.3(a): Ten most frequent cancers in males by age groups, Peninsular Malaysia 2003

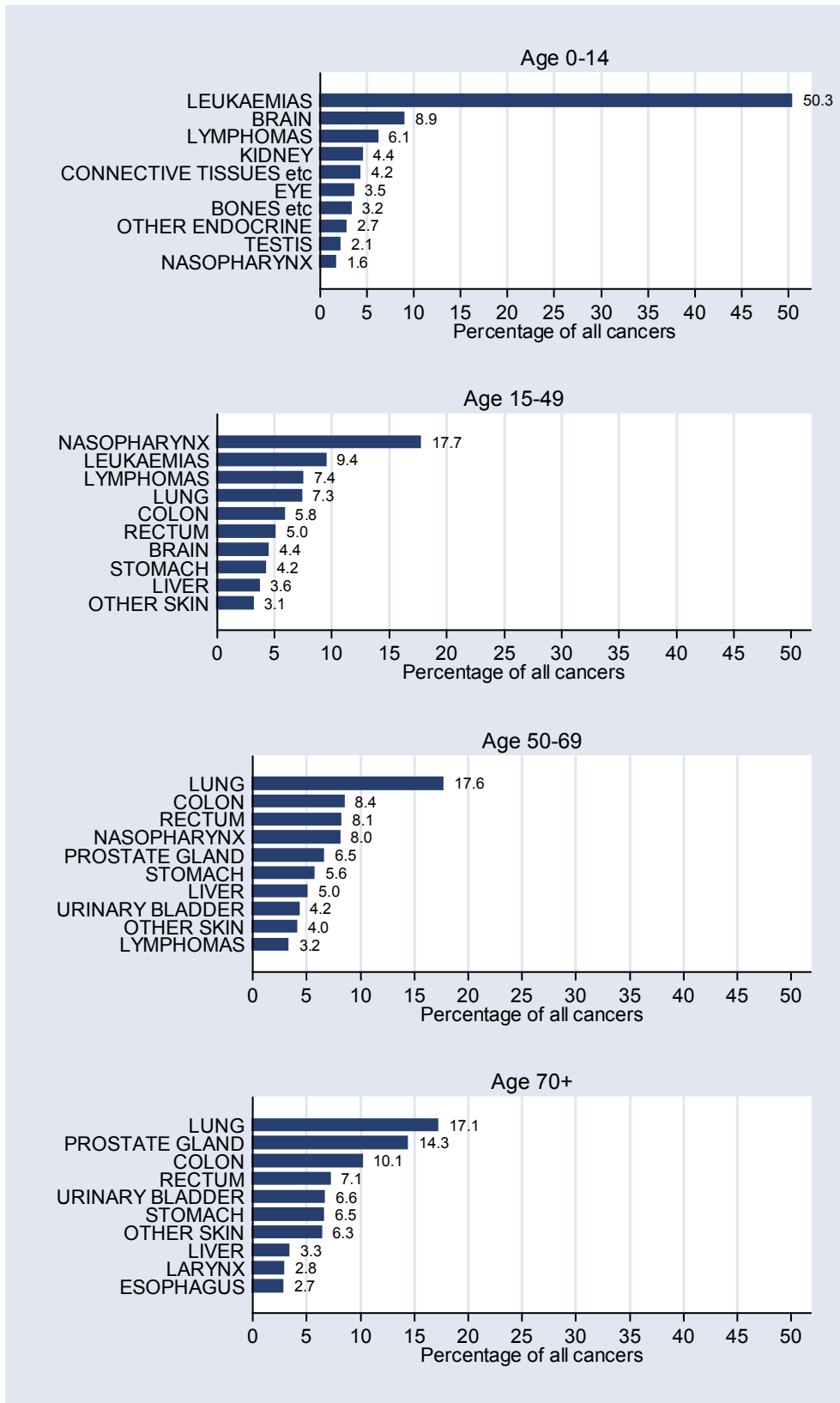
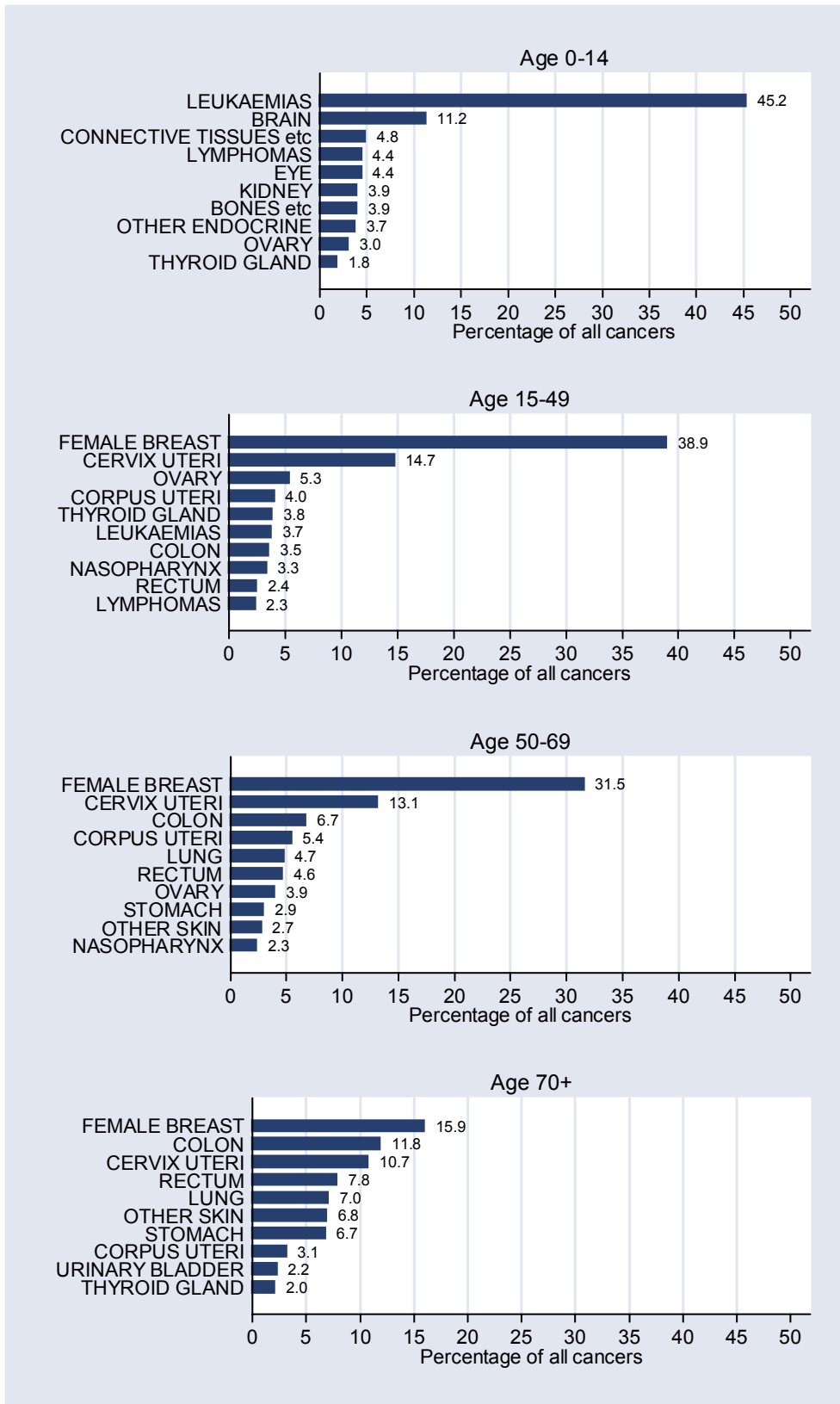


Figure 1.2.3(b): Ten most frequent cancers in females by age groups, Peninsular Malaysia 2003



CHAPTER 2 Selected cancer sites 2003

2.1 TONGUE

Table 2.1.1: **Tongue** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003

Sex	No.	%	CR	ASR
Male	125	56.1	1.3	1.8
Female	98	43.9	1.0	1.3
Both	223	100	1.2	1.6

Table 2.1.2: **Tongue** Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003

Age, year	Male			Female		
	No.	%	CR	No.	%	CR
0-9	0	0	0	0	0	0
10-19	0	0	0	0	0	0
20-29	3	2.4	0.2	3	3.1	0.2
30-39	13	10.4	1	9	9.2	0.7
40-49	18	14.4	1.6	18	18.4	1.6
50-59	27	21.6	3.6	19	19.4	2.7
60-69	38	30.4	9.5	28	28.6	6.8
70+	26	20.8	11.9	21	21.4	7.7

Figure 2.1.1: **Tongue** Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003

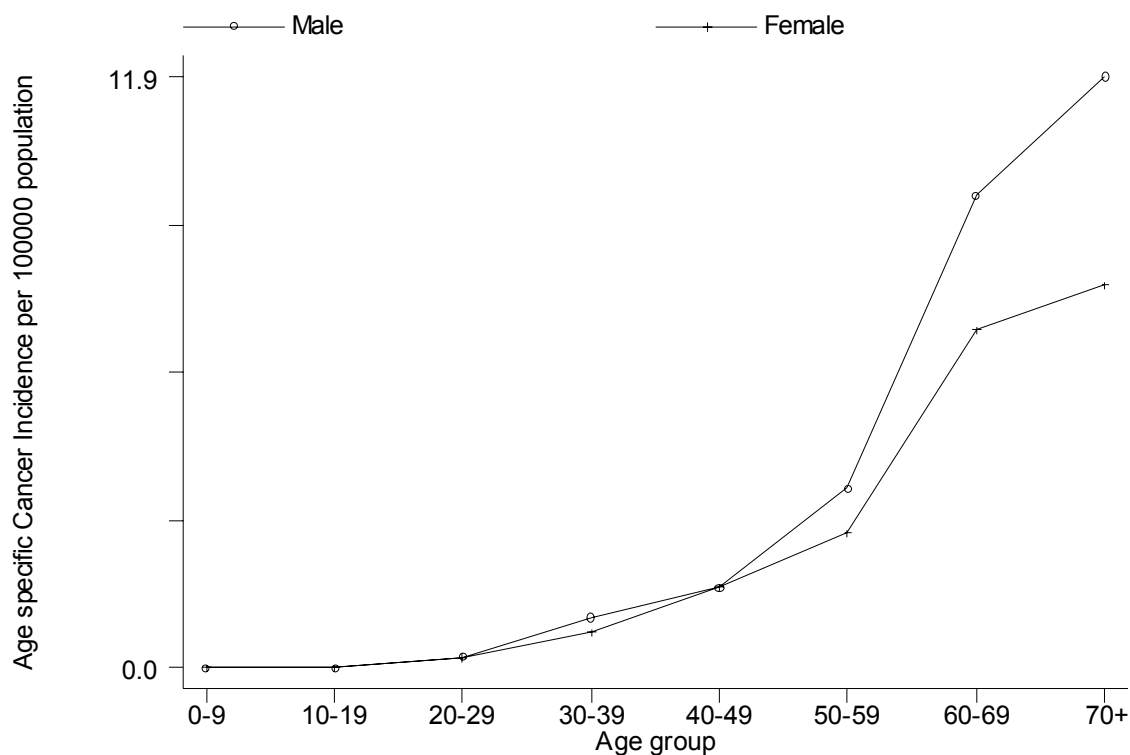


Table 2.1.3: **Tongue** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003

Ethnic group	Male				Female			
	No.	%	CR	ASR	No.	%	CR	ASR
Malay	38	33	0.6	0.9	24	27.9	0.4	0.5
Chinese	44	38.3	1.7	1.7	22	25.6	0.9	0.9
Indian	33	28.7	3.7	6.4	40	46.5	4.5	6.8

Table 2.1.4: **Tongue** Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003

		Age groups, year								CumR
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	
Male	Malay	0	0	0.2	1.1	0.6	2.8	3.4	5.1	0.1
	Chinese	0	0	0.2	1.2	2.2	2.6	12	4.9	0.2
	Indian	0	0	0	0	5.1	7.2	31.7	72.7	0.8
Female	Malay	0	0	0	0.9	1.1	0.8	1.4	2.8	0
	Chinese	0	0	0.5	0.5	1.1	0.8	5.8	2.8	0.1
	Indian	0	0	0.7	0	2.5	14.3	32.6	71.4	0.8

2.2 SALIVARY GLAND

Table 2.2.1: **Salivary Gland** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003

Sex	No.	%	CR	ASR
Male	61	51.7	0.6	0.8
Female	57	48.3	0.6	0.7
Both	118	100	0.6	0.8

Table 2.2.2: **Salivary Gland** Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003

Age, year	Male			Female		
	No.	%	CR	No.	%	CR
0-9	2	3.3	0.1	1	1.8	0
10-19	3	4.9	0.1	5	8.8	0.3
20-29	5	8.2	0.3	4	7	0.3
30-39	3	4.9	0.2	4	7	0.3
40-49	15	24.6	1.3	13	22.8	1.2
50-59	11	18	1.5	15	26.3	2.1
60-69	10	16.4	2.5	10	17.5	2.4
70+	12	19.7	5.5	5	8.8	1.8

Figure 2.2.1: **Salivary Gland** Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003

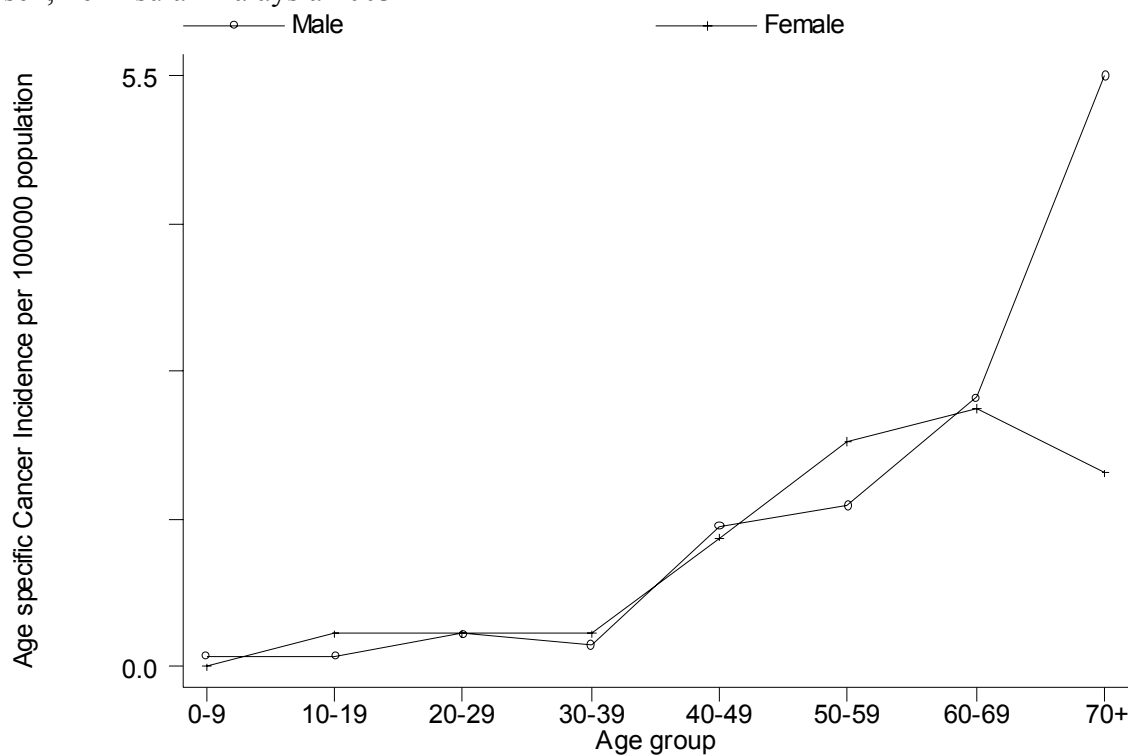


Table 2.2.3: **Salivary Gland** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003

Ethnic group	Male				Female			
	<i>No.</i>	<i>%</i>	<i>CR</i>	<i>ASR</i>	<i>No.</i>	<i>%</i>	<i>CR</i>	<i>ASR</i>
Malay	27	46.6	0.5	0.7	24	49	0.4	0.5
Chinese	29	50	1.1	1.2	17	34.7	0.7	0.6
Indian	2	3.4	0.2	0.2	8	16.3	0.9	1

Table 2.2.4: **Salivary Gland** Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003

		Age groups, year								CumR
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	
Male	Malay	0.1	0.1	0.2	0.1	1.4	1	1.5	5.1	0.1
	Chinese	0.2	0.2	0.7	0.5	1.1	2.2	3.8	7.4	0.1
	Indian	0	0.6	0	0	0	1.4	0	0	0
Female	Malay	0.1	0.2	0	0.4	0.8	1.3	1.8	2.8	0
	Chinese	0	0.7	0.2	0.3	1.4	1.6	1.9	0	0.1
	Indian	0	0	1.3	0	1.7	4.3	2.7	0	0.1

2.3 MOUTH

Table 2.3.1: **Mouth** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003

Sex	No.	%	CR	ASR
Male	114	43.5	1.2	1.6
Female	148	56.5	1.6	2.1
Both	262	100	1.4	1.9

Table 2.3.2: **Mouth** Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003

Age, year	Male			Female		
	No.	%	CR	No.	%	CR
0-9	1	0.9	0	0	0	0
10-19	1	0.9	0	2	1.4	0.1
20-29	7	6.1	0.4	1	0.7	0.1
30-39	6	5.3	0.5	7	4.7	0.5
40-49	23	20.2	2	14	9.5	1.2
50-59	26	22.8	3.5	42	28.4	5.9
60-69	30	26.3	7.5	49	33.1	11.8
70+	20	17.5	9.2	33	22.3	12.1

Figure 2.3.1: **Mouth** Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003

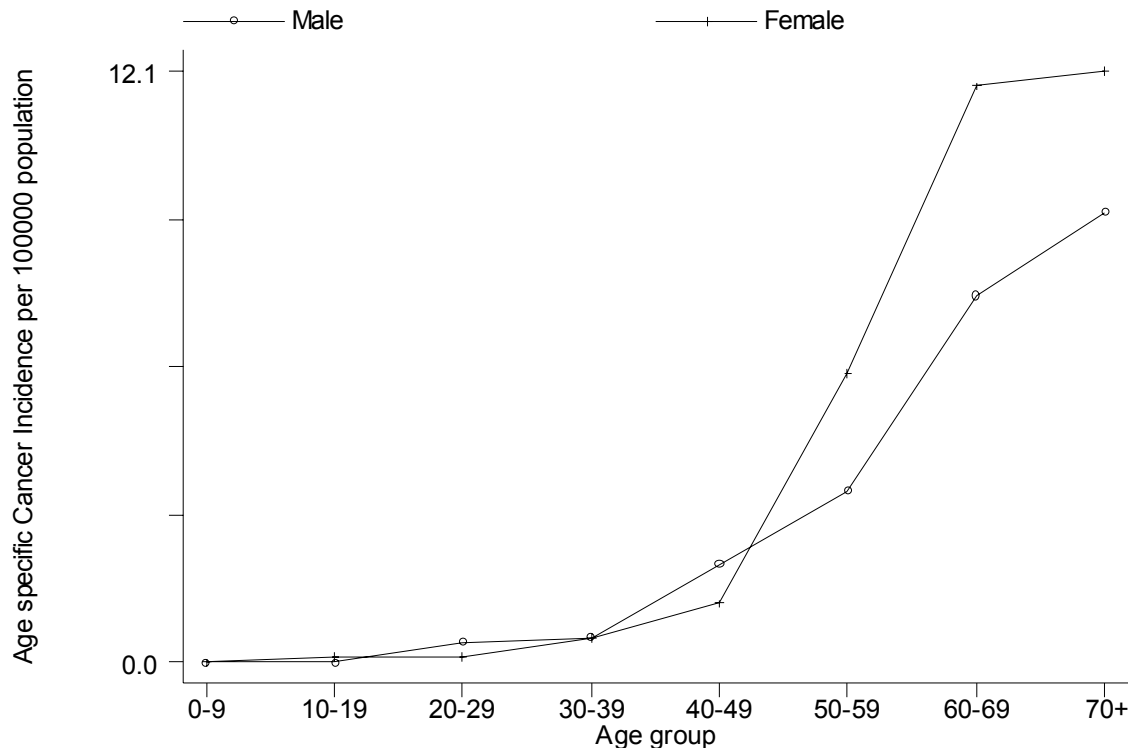


Table 2.3.3: **Mouth** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003

Ethnic group	Male				Female			
	No.	%	CR	ASR	No.	%	CR	ASR
Malay	30	29.7	0.5	0.8	24	17	0.4	0.6
Chinese	32	31.7	1.2	1.3	17	12.1	0.7	0.6
Indian	39	38.6	4.4	7.2	100	70.9	11.3	16.5

Table 2.3.4: **Mouth** Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003

		Age groups, year								CumR
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	
Male	Malay	0	0	0.3	0.3	1	2.5	1.5	5.1	0.1
	Chinese	0	0	0.7	0.7	1.3	1.1	8.9	4.9	0.2
	Indian	0	0	0.7	0.7	4.3	14.4	38.1	60.6	1
Female	Malay	0	0.1	0.1	0.1	0.6	1.3	1.4	6.3	0.1
	Chinese	0	0	0	0.5	0.6	2.4	2.6	2.8	0.1
	Indian	0	0.6	0	2.1	6.7	38.6	111.4	102	2.3

2.4 NASOPHARYNX

Table 2.4.1: **Nasopharynx** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003

Sex	No.	%	CR	ASR
Male	825	73.3	8.5	10.2
Female	300	26.7	3.2	3.6
Both	1125	100	5.9	6.9

Table 2.4.2: **Nasopharynx** Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003

Age, year	Male			Female		
	No.	%	CR	No.	%	CR
0-9	2	0.2	0.1	1	0.3	0
10-19	13	1.6	0.6	7	2.3	0.4
20-29	37	4.5	2.4	13	4.3	0.8
30-39	110	13.3	8.3	59	19.7	4.4
40-49	271	32.8	23.9	76	25.3	6.8
50-59	220	26.7	29.5	80	26.7	11.2
60-69	123	14.9	30.9	47	15.7	11.3
70+	49	5.9	22.5	17	5.7	6.2

Figure 2.4.1: **Nasopharynx** Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003

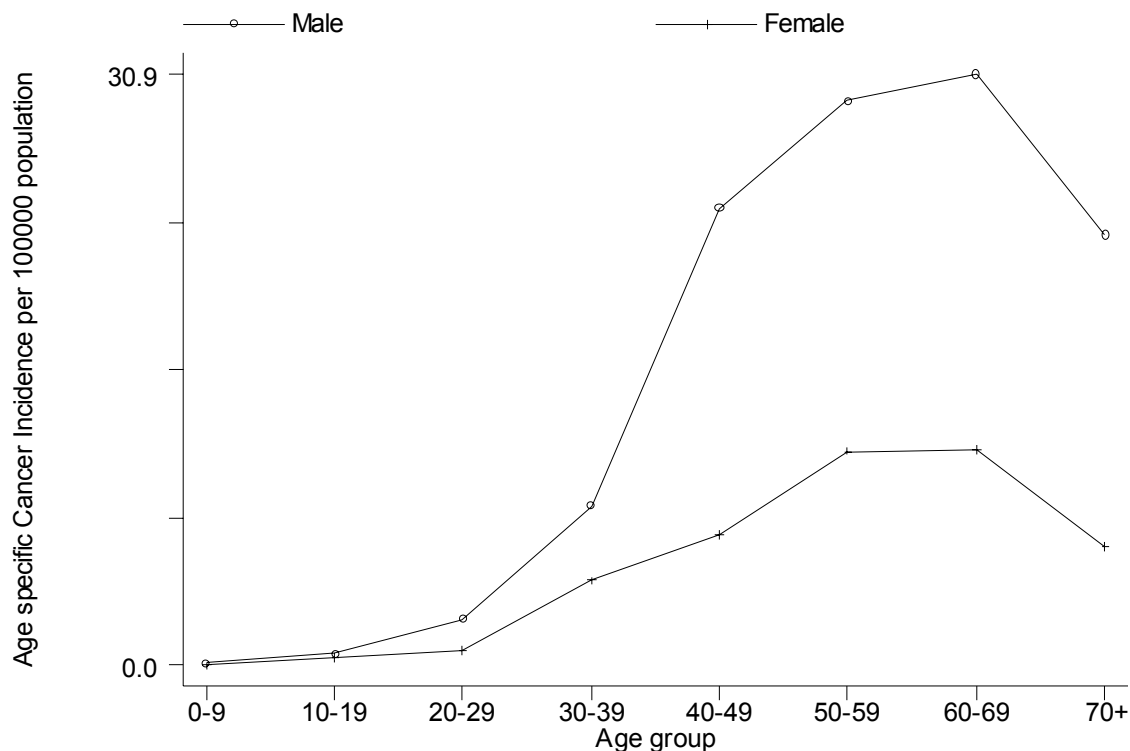


Table 2.4.3: **Nasopharynx** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003

Ethnic group	Male				Female			
	No.	%	CR	ASR	No.	%	CR	ASR
Malay	203	27.6	3.4	4.8	71	25.6	1.2	1.5
Chinese	516	70.2	19.6	18.1	201	72.6	8	7.4
Indian	16	2.2	1.8	2.6	5	1.8	0.6	0.8

Table 2.4.4: **Nasopharynx** Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003

		Age groups, year								CumR
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	
Male	Malay	0	0.5	0.7	3	9.3	15.3	14.3	16.2	0.5
	Chinese	0.2	0.2	3.6	19.5	50.4	48.8	49.4	28.4	1.9
	Indian	0	0	1.3	0.7	1.7	5.8	15.9	12.1	0.3
Female	Malay	0	0.4	0.3	2.2	3.2	4.2	2.3	3.5	0.1
	Chinese	0	0.2	1.7	10.2	14.1	21.6	24.6	10.3	0.8
	Indian	0	0	0.7	0	0.8	0	8.2	0	0.1

2.5 OESOPHAGUS

Table 2.5.1: **Oesophagus** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003

Sex	No.	%	CR	ASR
Male	197	64.2	2	3.1
Female	110	35.8	1.2	1.6
Both	307	100	1.6	2.3

Table 2.5.2: **Oesophagus** age specific Cancer Incidence per 100,000 population (CR), by age and sex, Peninsular Malaysia 2003

Age, year	Male			Female		
	No.	%	CR	No.	%	CR
0-9	0	0	0	0	0	0
10-19	0	0	0	1	0.9	0.1
20-29	2	1	0.1	0	0	0
30-39	5	2.5	0.4	4	3.6	0.3
40-49	30	15.2	2.6	15	13.6	1.3
50-59	36	18.3	4.8	29	26.4	4.1
60-69	67	34	16.8	31	28.2	7.5
70+	57	28.9	26.1	30	27.3	11

Figure 2.5.1: **Oesophagus** Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003

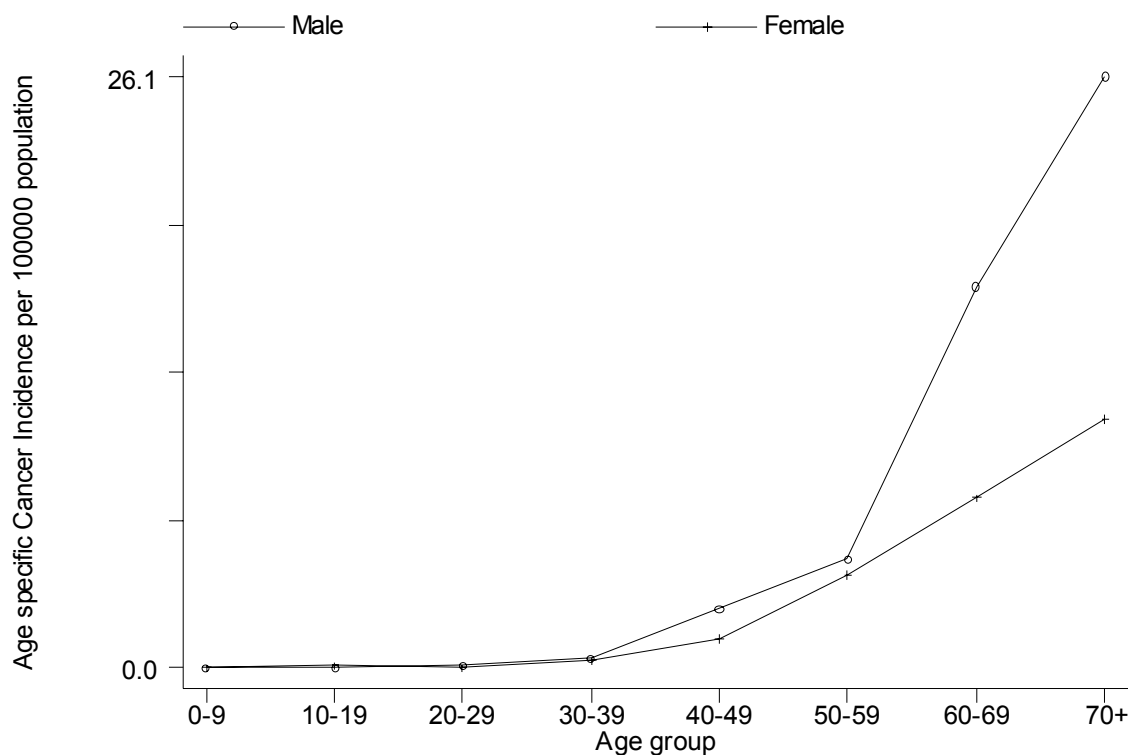


Table 2.5.3: **Oesophagus** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003

Ethnic group	Male				Female			
	No.	%	CR	ASR	No.	%	CR	ASR
Malay	58	31.5	1	1.7	33	32	0.6	0.9
Chinese	89	48.4	3.4	3.9	24	23.3	1	0.9
Indian	37	20.1	4.2	6.1	46	44.7	5.2	7.3

Table 2.5.4: **Oesophagus** Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003

		Age groups, year								CumR
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	
Male	Malay	0	0	0.1	0.1	1.3	3.8	10.8	9.4	0.2
	Chinese	0	0	0.2	0	1.9	4	20.9	45.7	0.5
	Indian	0	0	0	2.2	9.4	8.7	34.9	36.4	0.6
Female	Malay	0	0	0	0.1	0.6	3.4	4.6	3.5	0.1
	Chinese	0	0	0	0.3	0.3	1.6	3.2	12.1	0.1
	Indian	0	0.6	0	0.7	6.7	17.1	35.3	56.1	0.9

2.6 STOMACH

Table 2.6.1: **Stomach** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003

Sex	No.	%	CR	ASR
Male	476	57.6	4.9	7.2
Female	350	42.4	3.7	4.8
Both	826	100	4.3	6

Table 2.6.2: **Stomach** Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003

Age, year	Male			Female		
	No.	%	CR	No.	%	CR
0-9	2	0.4	0.1	1	0.3	0
10-19	1	0.2	0	3	0.9	0.2
20-29	11	2.3	0.7	2	0.6	0.1
30-39	26	5.5	2	22	6.3	1.6
40-49	61	12.8	5.4	53	15.1	4.7
50-59	97	20.4	13	74	21.1	10.4
60-69	142	29.8	35.7	82	23.4	19.8
70+	136	28.6	62.3	113	32.3	41.3

Figure 2.6.1: **Stomach** Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003

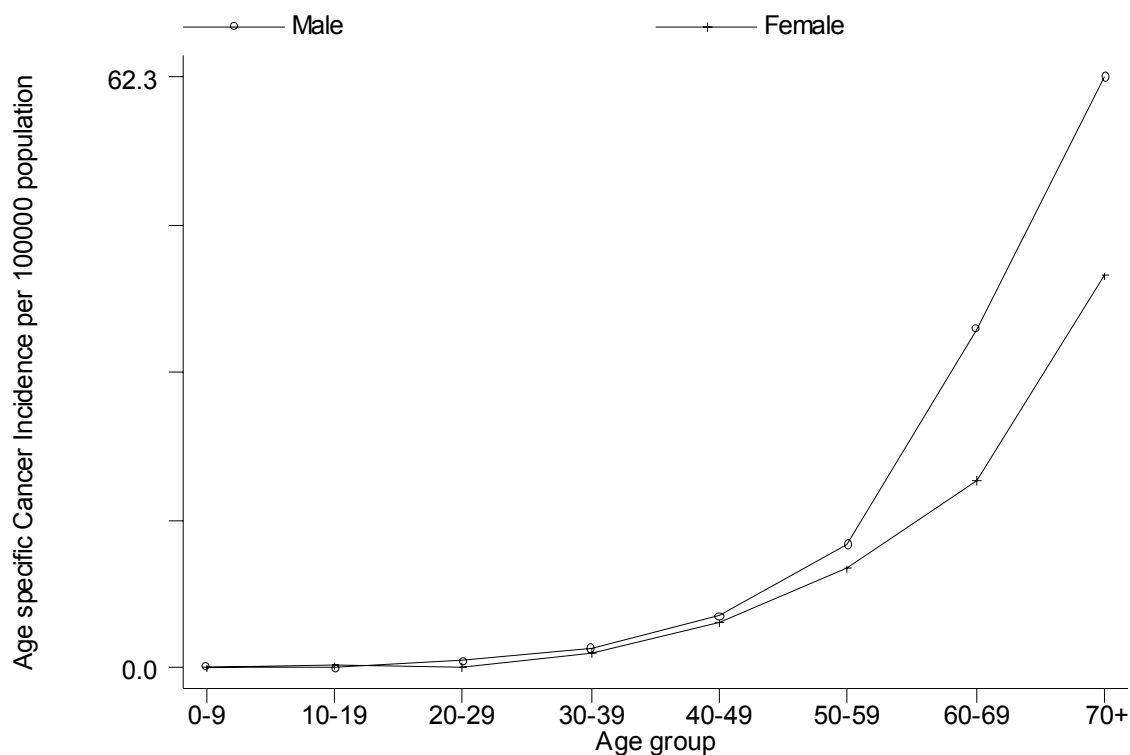


Table 2.6.3: **Stomach** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003

Ethnic group	Male				Female			
	No.	%	CR	ASR	No.	%	CR	ASR
Malay	101	22.4	1.7	2.6	53	15.9	0.9	1.3
Chinese	280	62.1	10.6	11.9	228	68.3	9.1	8.7
Indian	70	15.5	7.9	12.9	53	15.9	6	7.9

Table 2.6.4: **Stomach** Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003

		Age groups, year								CumR
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	
Male	Malay	0.1	0.1	0.2	1.2	3.4	6.4	10.8	17	0.3
	Chinese	0	0	1.7	2.2	7.8	18	58.9	115	1.5
	Indian	0	0	1.3	2.9	6	24.5	60.3	127.3	1.2
Female	Malay	0	0.1	0.1	0.6	1.4	4.9	4.6	5.6	0.2
	Chinese	0	0.5	0	2.8	7.9	14	36.2	89.6	1
	Indian	0	0	0.7	2.9	10.9	18.6	35.3	45.9	1

2.7 COLON

Table 2.7.1: **Colon** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003

Sex	No.	%	CR	ASR
Male	718	49.7	7.4	10.9
Female	728	50.3	7.7	10
Both	1446	100	7.6	10.4

Table 2.7.2: **Colon** Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003

Age, year	Male			Female		
	No.	%	CR	No.	%	CR
0-9	1	0.1	0	1	0.1	0
10-19	8	1.1	0.4	5	0.7	0.3
20-29	13	1.8	0.8	19	2.6	1.2
30-39	36	5	2.7	40	5.5	3
40-49	85	11.8	7.5	98	13.5	8.7
50-59	148	20.6	19.9	180	24.7	25.2
60-69	214	29.8	53.7	185	25.4	44.6
70+	213	29.7	97.6	200	27.5	73

Figure 2.7.1: **Colon** Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003

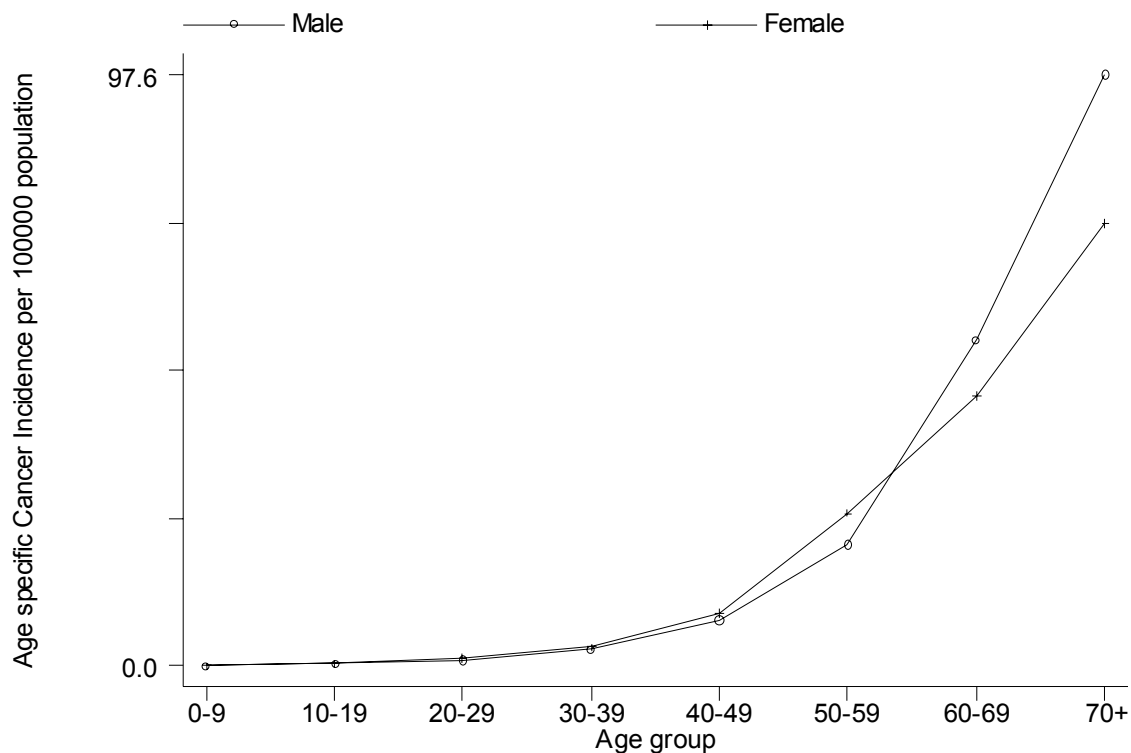


Table 2.7.3: **Colon** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003

Ethnic group	Male				Female			
	No.	%	CR	ASR	No.	%	CR	ASR
Malay	201	29.5	3.4	5.6	219	31.3	3.8	5.3
Chinese	451	66.1	17.2	19	443	63.4	17.6	17.1
Indian	30	4.4	3.4	5.5	37	5.3	4.2	5.4

Table 2.7.4: **Colon** Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003

		Age groups, year								CumR
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	
Male	Malay	0.1	0.4	0.7	2	4	11.4	25.6	43.4	0.7
	Chinese	0	0.4	1	4	14	31.5	86.7	190.4	2.2
	Indian	0	0	0	0.7	3.4	11.5	38.1	30.3	0.7
Female	Malay	0.1	0.2	1.6	2.1	5.9	14.8	21.1	30.6	0.7
	Chinese	0	0.2	1	4.9	13.5	40	80.8	136.2	2
	Indian	0	0	0	1.4	6.7	20	24.5	20.4	0.5

2.8 RECTUM

Table 2.8.1: **Rectum** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003

Sex	No.	%	CR	ASR
Male	617	55.8	6.4	9.3
Female	489	44.2	5.2	6.8
Both	1106	100	5.8	8

Table 2.8.2: **Rectum** Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003

Age, year	Male			Female		
	No.	%	CR	No.	%	CR
0-9	1	0.2	0	0	0	0
10-19	1	0.2	0	1	0.2	0.1
20-29	14	2.3	0.9	6	1.2	0.4
30-39	25	4.1	1.9	33	6.7	2.5
40-49	80	13	7.1	69	14.1	6.1
50-59	147	23.8	19.7	105	21.5	14.7
60-69	199	32.3	50	143	29.2	34.5
70+	150	24.3	68.7	132	27	48.2

Figure 2.8.1: **Rectum** Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003

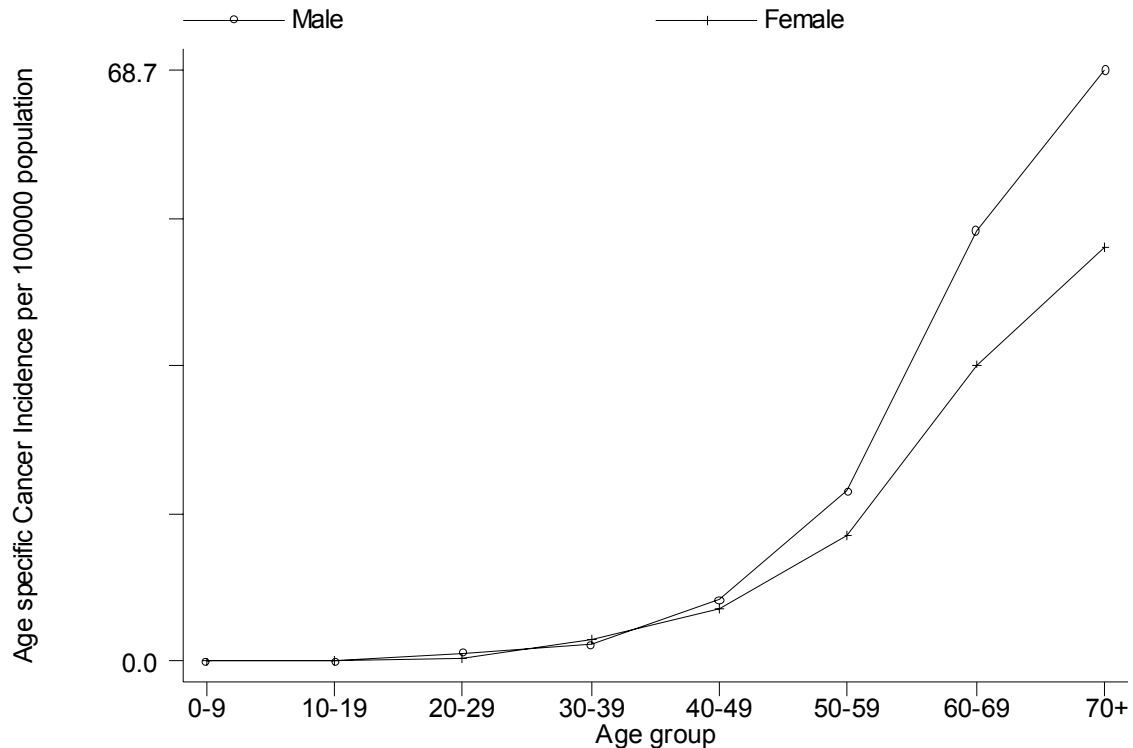


Table 2.8.3: **Rectum** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003

Ethnic group	Male				Female			
	No.	%	CR	ASR	No.	%	CR	ASR
Malay	242	41.7	4.1	6.7	181	38.2	3.1	4.5
Chinese	300	51.7	11.4	12.5	263	55.5	10.4	10.2
Indian	38	6.6	4.3	6.8	30	6.3	3.4	4.6

Table 2.8.4: **Rectum** Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003

		Age groups, year								CumR
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	
Male	Malay	0	0.1	0.8	2	5.3	16.3	34.4	43.4	0.9
	Chinese	0	0	0.7	1.5	8.9	24.9	67.1	103.8	1.4
	Indian	0	0	1.3	0.7	6	10.1	47.6	36.4	0.8
Female	Malay	0	0.1	0.5	2.2	5.1	11.2	22.4	23.7	0.6
	Chinese	0	0	0	2.8	9	19.2	54.3	82.1	1.2
	Indian	0	0	0	1.4	3.3	15.7	8.2	51	0.5

2.9 LIVER

Table 2.9.1: **Liver** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003

Sex	No.	%	CR	ASR
Male	378	71.3	3.9	5.5
Female	152	28.7	1.6	2.1
Both	530	100	2.8	3.7

Table 2.9.2: **Liver** Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003

Age, year	Male			Female		
	No.	%	CR	No.	%	CR
0-9	6	1.6	0.3	4	2.6	0.2
10-19	4	1.1	0.2	3	2	0.2
20-29	7	1.9	0.4	3	2	0.2
30-39	18	4.8	1.4	6	3.9	0.4
40-49	59	15.6	5.2	19	12.5	1.7
50-59	104	27.5	14	34	22.4	4.8
60-69	111	29.4	27.9	51	33.6	12.3
70+	69	18.3	31.6	32	21.1	11.7

Figure 2.9.1: **Liver** Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003

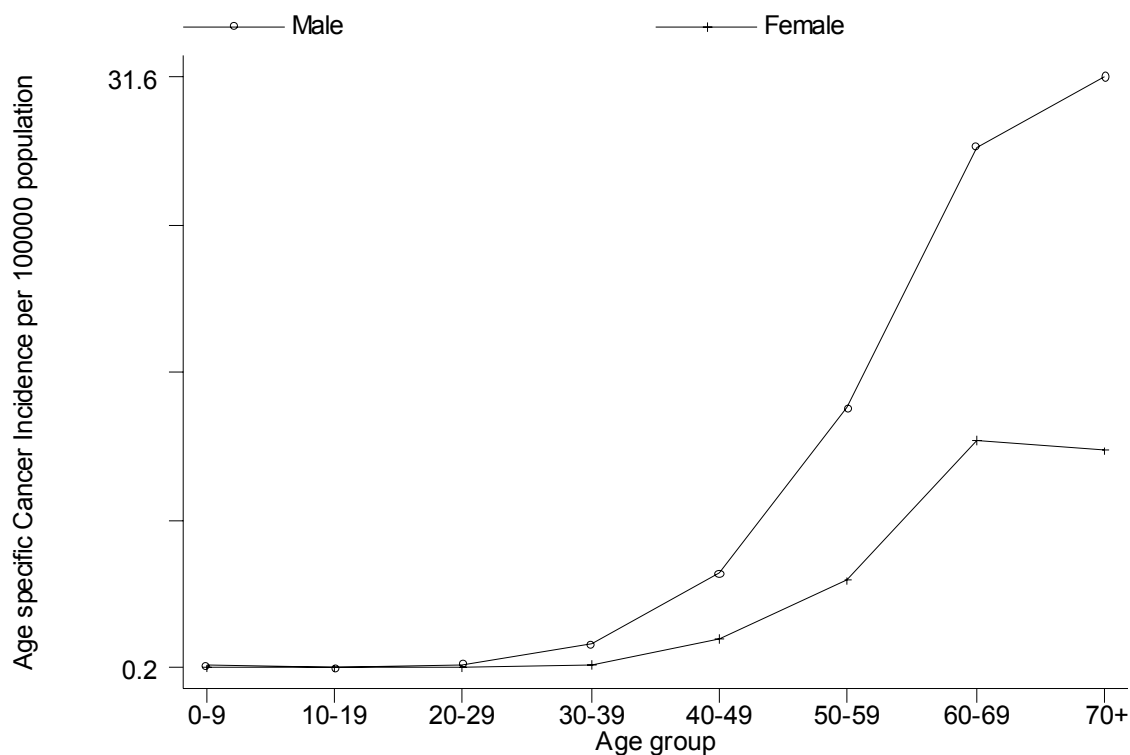


Table 2.9.3: **Liver** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003

Ethnic group	Male				Female			
	No.	%	CR	ASR	No.	%	CR	ASR
Malay	128	35.6	2.2	3.4	42	29	0.7	1.1
Chinese	214	59.4	8.1	8.5	89	61.4	3.5	3.6
Indian	18	5	2	3.1	14	9.7	1.6	2

Table 2.9.4: **Liver** Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003

		Age groups, year								
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	CumR
Male	Malay	0.3	0.1	0.5	0.9	3.5	9.2	13.8	20.4	0.4
	Chinese	0	0.4	0.2	1.7	8.6	22.4	46.2	47	0.9
	Indian	0.5	0	0	0.7	4.3	2.9	12.7	30.3	0.5
Female	Malay	0	0.2	0.1	0	1.1	3.1	6	4.9	0.1
	Chinese	0.9	0	0	1.3	2.3	7.2	22	18.7	0.4
	Indian	0	0.6	0.7	0	3.3	4.3	8.2	10.2	0.2

2.10 GALLBLADDER, ETC

Table 2.10.1: **Gallbladder** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003

Sex	No.	%	CR	ASR
Male	81	51.3	0.8	1.2
Female	77	48.7	0.8	1.1
Both	158	100	0.8	1.1

Table 2.10.2: **Gallbladder** Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003

Age, year	Male			Female		
	No.	%	CR	No.	%	CR
0-9	0	0	0	0	0	0
10-19	0	0	0	0	0	0
20-29	1	1.2	0.1	1	1.3	0.1
30-39	7	8.6	0.5	6	7.8	0.4
40-49	7	8.6	0.6	11	14.3	1
50-59	28	34.6	3.8	16	20.8	2.2
60-69	23	28.4	5.8	24	31.2	5.8
70+	15	18.5	6.9	19	24.7	6.9

Figure 2.10.1: **Gallbladder** Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003

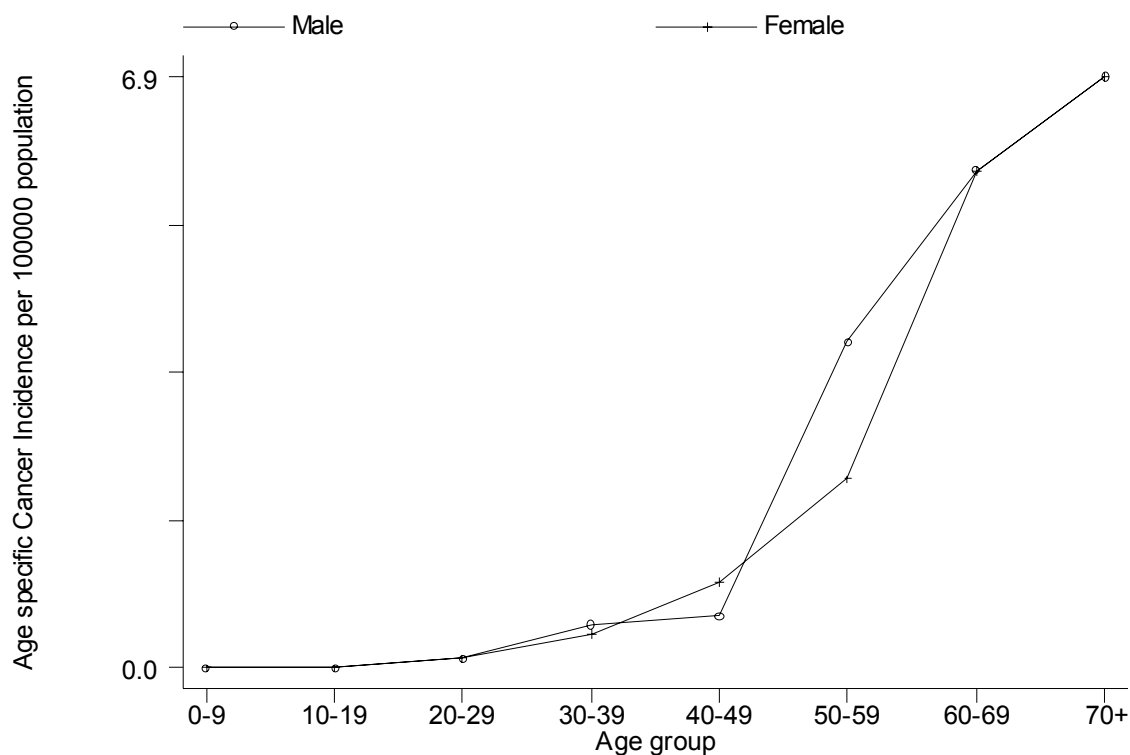


Table 2.10.3: **Gallbladder** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003

Ethnic group	Male				Female			
	No.	%	CR	ASR	No.	%	CR	ASR
Malay	29	37.7	0.5	0.8	33	44.6	0.6	0.8
Chinese	43	55.8	1.6	1.7	33	44.6	1.3	1.3
Indian	5	6.5	0.6	0.8	8	10.8	0.9	1.3

Table 2.10.4: **Gallbladder** Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003

		Age groups, year								CumR
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	
Male	Malay	0	0	0.1	0.5	0.3	2.3	4.4	3.4	0.1
	Chinese	0	0	0	0.2	1.3	5.5	8.2	11.1	0.2
	Indian	0	0	0	0.7	0	4.3	0	6.1	0.1
Female	Malay	0	0	0.1	0.3	0.8	2.6	4.6	3.5	0.1
	Chinese	0	0	0	0.8	1.1	2	7.8	8.4	0.2
	Indian	0	0	0	0.7	1.7	0	2.7	20.4	0.1

2.11 PANCREAS

Table 2.11.1: **Pancreas** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003

Sex	No.	%	CR	ASR
Male	113	58.2	1.2	1.7
Female	81	41.8	0.9	1.1
Both	194	100	1	1.4

Table 2.11.2: **Pancreas** Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003

Age, year	Male			Female		
	No.	%	CR	No.	%	CR
0-9	0	0	0	1	1.2	0
10-19	2	1.8	0.1	2	2.5	0.1
20-29	0	0	0	3	3.7	0.2
30-39	3	2.7	0.2	4	4.9	0.3
40-49	10	8.8	0.9	10	12.3	0.9
50-59	36	31.9	4.8	16	19.8	2.2
60-69	31	27.4	7.8	22	27.2	5.3
70+	31	27.4	14.2	23	28.4	8.4

Figure 2.11.1: **Pancreas** Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003

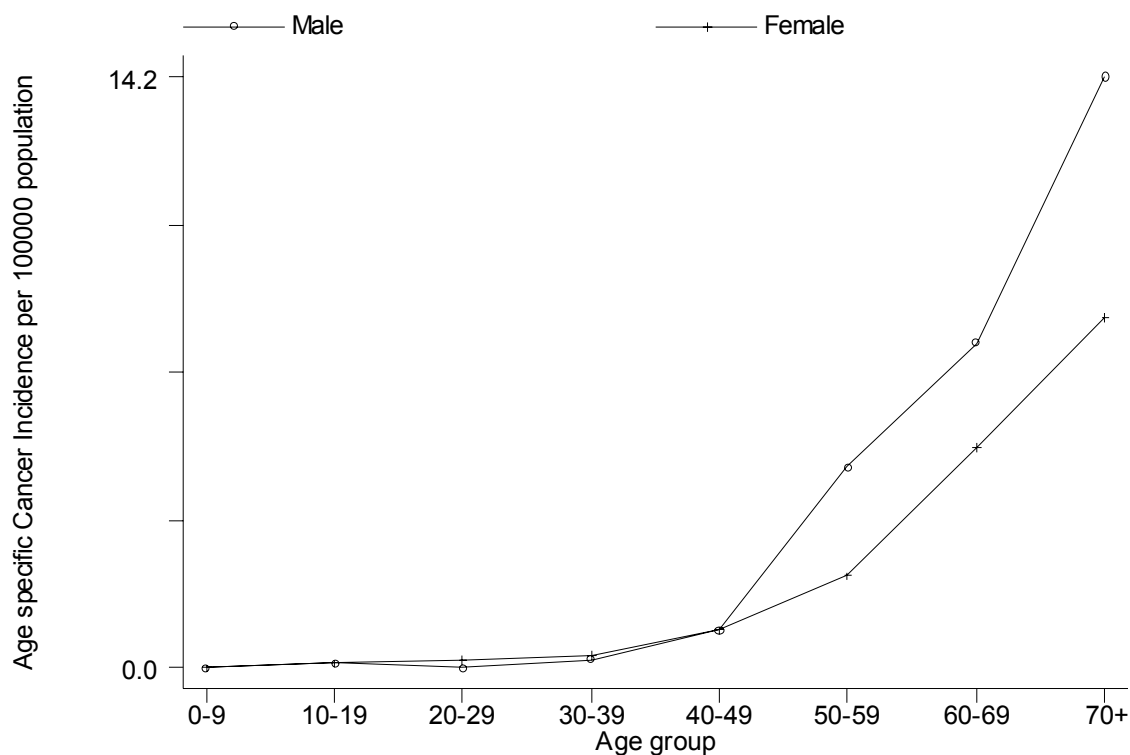


Table 2.11.3: **Pancreas** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003

Ethnic group	Male				Female			
	No.	%	CR	ASR	No.	%	CR	ASR
Malay	38	36.2	0.6	1	33	41.3	0.6	0.8
Chinese	59	56.2	2.2	2.4	38	47.5	1.5	1.4
Indian	8	7.6	0.9	1.3	9	11.3	1	1.6

Table 2.11.4: **Pancreas** Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003

		Age groups, year								CumR
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	
Male	Malay	0	0	0	0.3	0.6	3.6	4.9	6.8	0.1
	Chinese	0	0	0	0	1.1	7.3	10.1	23.5	0.3
	Indian	0	0.6	0	0.7	1.7	0	9.5	6.1	0.1
Female	Malay	0.1	0.2	0.2	0.1	0.6	1.8	4.1	4.9	0.1
	Chinese	0	0	0.2	0.5	1.4	3.2	7.1	10.3	0.1
	Indian	0	0	0	0.7	0	1.4	5.4	25.5	0.2

2.12 NOSE AND SINUSES

Table 2.12.1: **Nose and Sinuses** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003

Sex	No.	%	CR	ASR
Male	92	68.1	1	1.3
Female	43	31.9	0.5	0.6
Both	135	100	0.7	0.9

Table 2.12.2: **Nose and Sinuses** Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003

Age, year	Male			Female		
	No.	%	CR	No.	%	CR
0-9	3	3.3	0.1	0	0	0
10-19	3	3.3	0.1	1	2.3	0.1
20-29	2	2.2	0.1	1	2.3	0.1
30-39	9	9.8	0.7	3	7	0.2
40-49	15	16.3	1.3	8	18.6	0.7
50-59	20	21.7	2.7	9	20.9	1.3
60-69	19	20.7	4.8	13	30.2	3.1
70+	21	22.8	9.6	8	18.6	2.9

Figure 2.12.1: **Nose and Sinuses** Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003

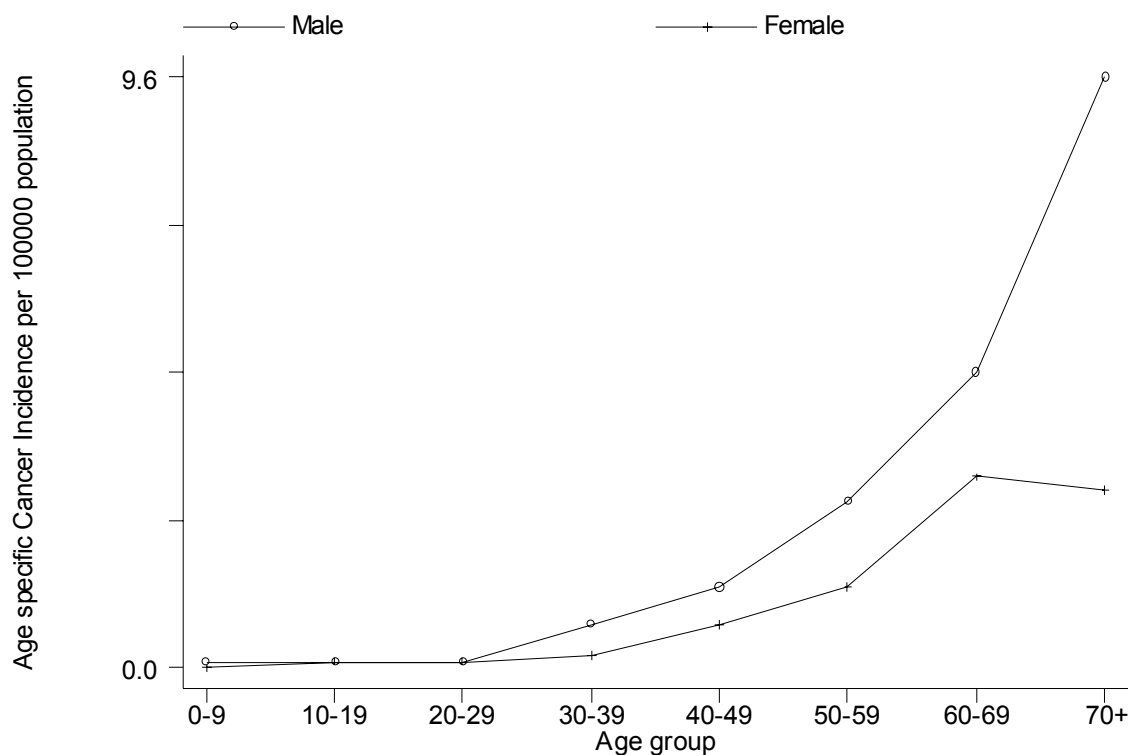


Table 2.12.3: **Nose and Sinuses** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003

Ethnic group	Male				Female			
	<i>No.</i>	<i>%</i>	<i>CR</i>	<i>ASR</i>	<i>No.</i>	<i>%</i>	<i>CR</i>	<i>ASR</i>
Malay	38	45.2	0.6	0.9	17	40.5	0.3	0.4
Chinese	41	48.8	1.6	1.6	22	52.4	0.9	0.8
Indian	5	6	0.6	0.7	3	7.1	0.3	0.5

Table 2.12.4: **Nose and Sinuses** Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003

		Age groups, year								CumR
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	
Male	Malay	0	0.1	0	0.7	1.3	2.3	2.9	6.8	0.1
	Chinese	0.2	0.2	0	0.7	1.9	3.3	6.3	12.4	0.2
	Indian	0	0	1.3	0.7	0	1.4	0	6.1	0
Female	Malay	0	0	0.1	0.3	0.6	0.8	2.7	0.7	0
	Chinese	0	0.2	0	0	0.8	2.4	3.9	5.6	0.1
	Indian	0	0	0	0.7	0	0	2.7	5.1	0.1

2.13 LARYNX

Table 2.13.1: **Larynx** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003

Sex	No.	%	CR	ASR
Male	206	87.7	2.1	3.2
Female	29	12.3	0.3	0.4
Both	235	100	1.2	1.8

Table 2.13.2: **Larynx** Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003

Age, year	Male			Female		
	No.	%	CR	No.	%	CR
0-9	1	0.5	0	1	3.4	0
10-19	1	0.5	0	0	0	0
20-29	3	1.5	0.2	0	0	0
30-39	7	3.4	0.5	0	0	0
40-49	18	8.7	1.6	2	6.9	0.2
50-59	44	21.4	5.9	5	17.2	0.7
60-69	74	35.9	18.6	10	34.5	2.4
70+	58	28.2	26.6	11	37.9	4

Figure 2.13.1: **Larynx** Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003

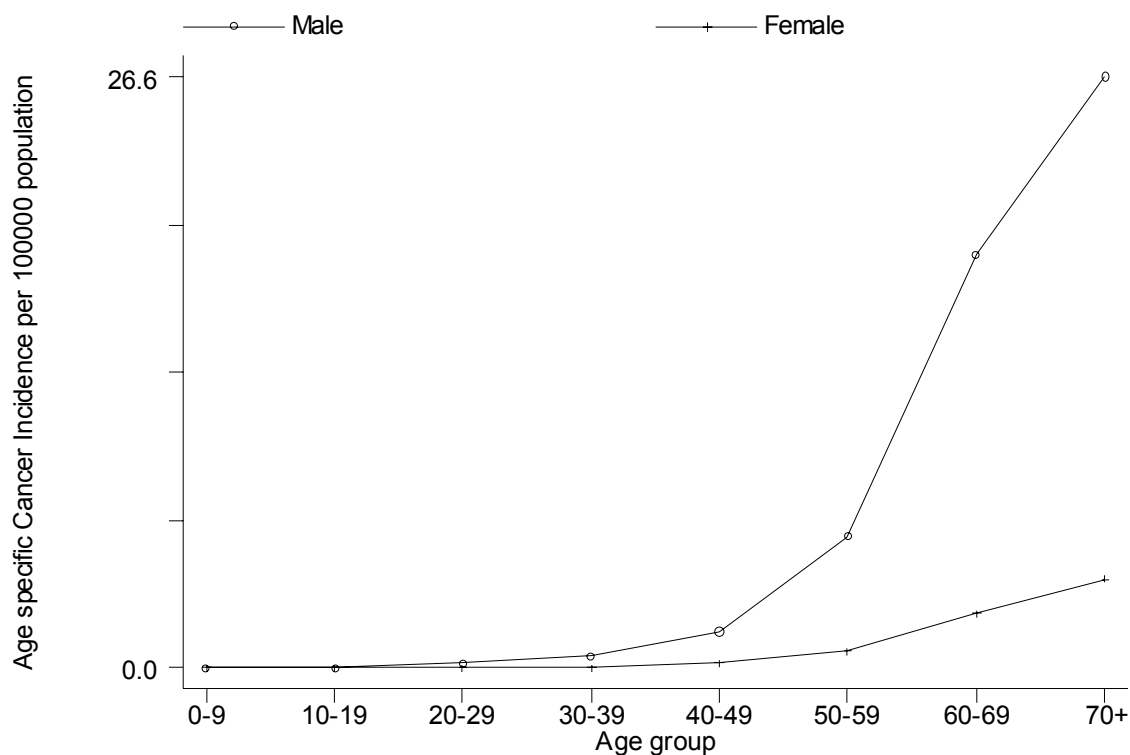


Table 2.13.3: **Larynx** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003

Ethnic group	Male				Female			
	No.	%	CR	ASR	No.	%	CR	ASR
Malay	59	31.9	1	1.7	8	29.6	0.1	0.2
Chinese	101	54.6	3.8	4.2	12	44.4	0.5	0.5
Indian	25	13.5	2.8	4.7	7	25.9	0.8	1.2

Table 2.13.4: **Larynx** Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003

		Age groups, year								CumR
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	
Male	Malay	0	0.1	0.1	0.3	0.6	4.6	7.9	14.5	0.2
	Chinese	0	0	0	1	3	6.2	25.9	34.6	0.5
	Indian	0.5	0	0.7	0	0.9	8.7	28.6	42.4	0.6
Female	Malay	0	0	0	0	0	0.5	1.4	2.1	0
	Chinese	0	0	0	0	0.6	0.8	1.9	4.7	0.1
	Indian	0.6	0	0	0	0	1.4	5.4	15.3	0.1

2.14 LUNG

Table 2.14.1: **Lung** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003

Sex	No.	%	CR	ASR
Male	1298	73.8	13.4	20.3
Female	460	26.2	4.9	6.5
Both	1758	100	9.2	13.1

Table 2.14.2: **Lung** Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003

Age, year	Male			Female		
	No.	%	CR	No.	%	CR
0-9	2	0.2	0.1	0	0	0
10-19	11	0.8	0.5	4	0.9	0.2
20-29	19	1.5	1.2	5	1.1	0.3
30-39	27	2.1	2	15	3.3	1.1
40-49	123	9.5	10.9	64	13.9	5.7
50-59	291	22.4	39	111	24.1	15.5
60-69	465	35.8	116.8	142	30.9	34.2
70+	360	27.7	165	119	25.9	43.5

Figure 2.14.1: **Lung** Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003

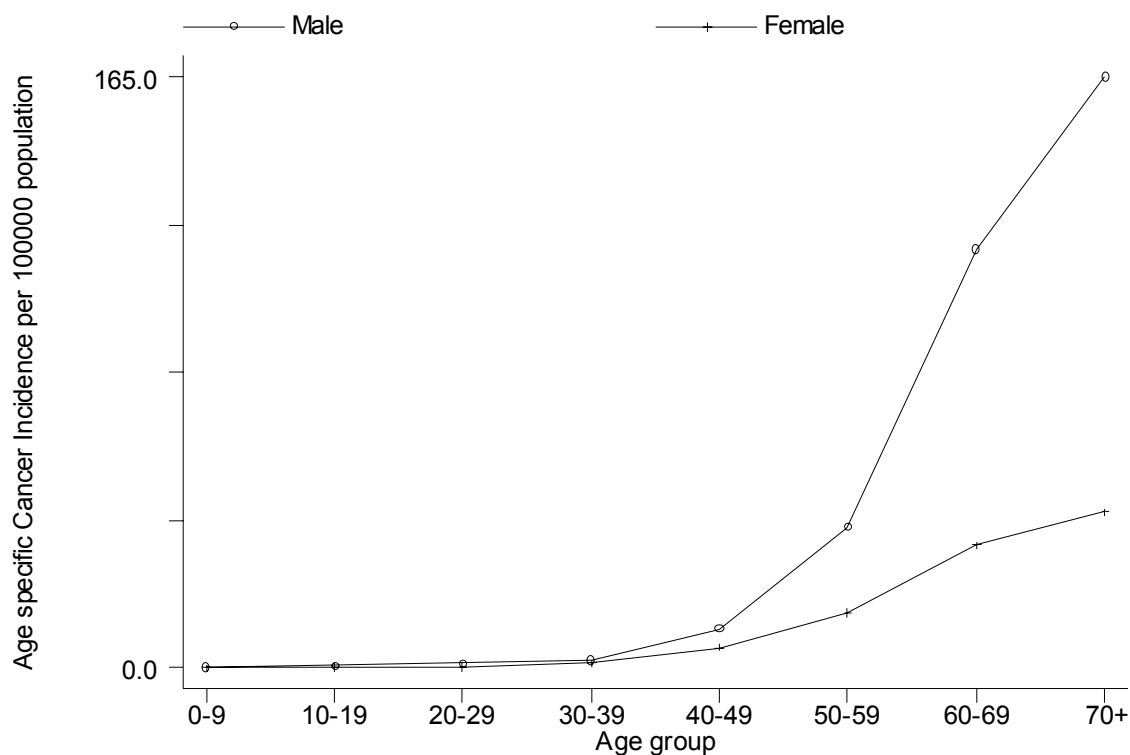


Table 2.14.3: **Lung** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003

Ethnic group	Male				Female			
	<i>No.</i>	<i>%</i>	<i>CR</i>	<i>ASR</i>	<i>No.</i>	<i>%</i>	<i>CR</i>	<i>ASR</i>
Malay	456	36.5	7.7	12.9	124	27.9	2.1	3.1
Chinese	738	59.1	28.1	31.5	292	65.6	11.6	11.4
Indian	54	4.3	6.1	11.1	29	6.5	3.3	4.4

Table 2.14.4: **Lung** Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003

		Age groups, year								CumR
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	
Male	Malay	0	0.7	1.2	0.9	11.3	29.3	69.3	86.8	1.7
	Chinese	0.4	0.2	1	4.2	11.3	57.6	178.5	288	4
	Indian	0	0	0.7	0	2.6	14.4	79.4	90.9	1.5
Female	Malay	0	0.2	0.3	0.5	3.7	10.4	16	11.1	0.4
	Chinese	0	0.2	0.5	2	9.6	24	58.8	89.6	1.4
	Indian	0	0	0	1.4	4.2	14.3	21.7	20.4	0.6

2.15 BONE

Table 2.15.1: **Bone** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003

Sex	No.	%	CR	ASR
Male	97	55.1	1	1
Female	79	44.9	0.8	0.8
Both	176	100	0.9	0.9

Table 2.15.2: **Bone** Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003

Age, year	Male			Female		
	No.	%	CR	No.	%	CR
0-9	5	5.2	0.2	4	5.1	0.2
10-19	28	28.9	1.4	28	35.4	1.5
20-29	13	13.4	0.8	16	20.3	1
30-39	15	15.5	1.1	9	11.4	0.7
40-49	15	15.5	1.3	7	8.9	0.6
50-59	10	10.3	1.3	6	7.6	0.8
60-69	4	4.1	1	6	7.6	1.4
70+	7	7.2	3.2	3	3.8	1.1

Figure 2.15.1: **Bone** Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003

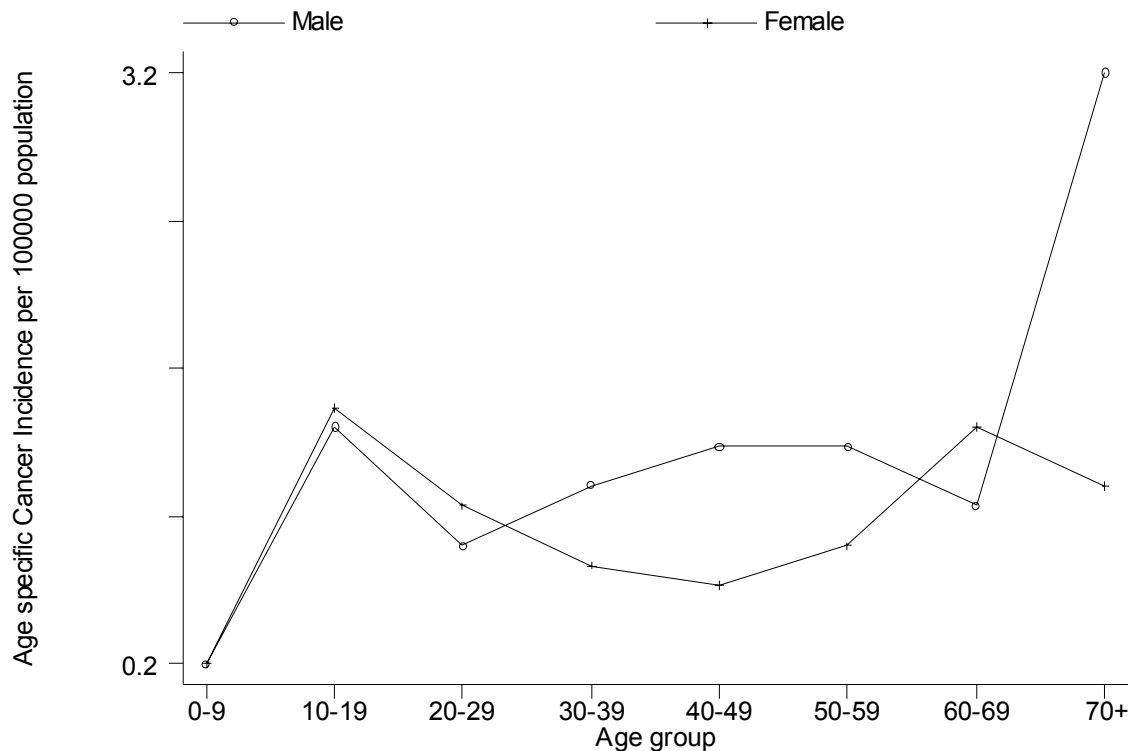


Table 2.15.3: **Bone** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003

Ethnic group	Male				Female			
	No.	%	CR	ASR	No.	%	CR	ASR
Malay	55	63.2	0.9	1	45	61.6	0.8	0.8
Chinese	27	31	1	1	18	24.7	0.7	0.7
Indian	5	5.7	0.6	0.5	10	13.7	1.1	1.4

Table 2.15.4: **Bone** Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003

		Age groups, year								CumR
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	
Male	Malay	0.1	1	1	1.3	1.8	1.3	0	3.4	0.1
	Chinese	0.6	1.1	0.7	1	0.5	1.8	1.3	3.7	0.1
	Indian	0	1.7	0	0.7	0.9	0	0	0	0
Female	Malay	0.2	1.1	1.1	0.8	0.8	0.3	2.3	0	0.1
	Chinese	0.2	1.7	0.7	0.5	0.3	1.2	0	0.9	0.1
	Indian	0	1.8	1.3	0	0.8	1.4	2.7	10.2	0.1

2.16 OTHER SKIN

Table 2.16.1: **Other Skin** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003

Sex	No.	%	CR	ASR
Male	380	54.1	3.9	5.9
Female	322	45.9	3.4	4.5
Both	702	100	3.7	5.1

Table 2.16.2: **Other Skin** Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003

Age, year	Male			Female		
	No.	%	CR	No.	%	CR
0-9	1	0.3	0	2	0.6	0.1
10-19	4	1.1	0.2	6	1.9	0.3
20-29	10	2.6	0.6	3	0.9	0.2
30-39	21	5.5	1.6	15	4.7	1.1
40-49	39	10.3	3.4	36	11.2	3.2
50-59	67	17.6	9	55	17.1	7.7
60-69	105	27.6	26.4	90	28	21.7
70+	133	35	61	115	35.7	42

Figure 2.16.1: **Other Skin** Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003

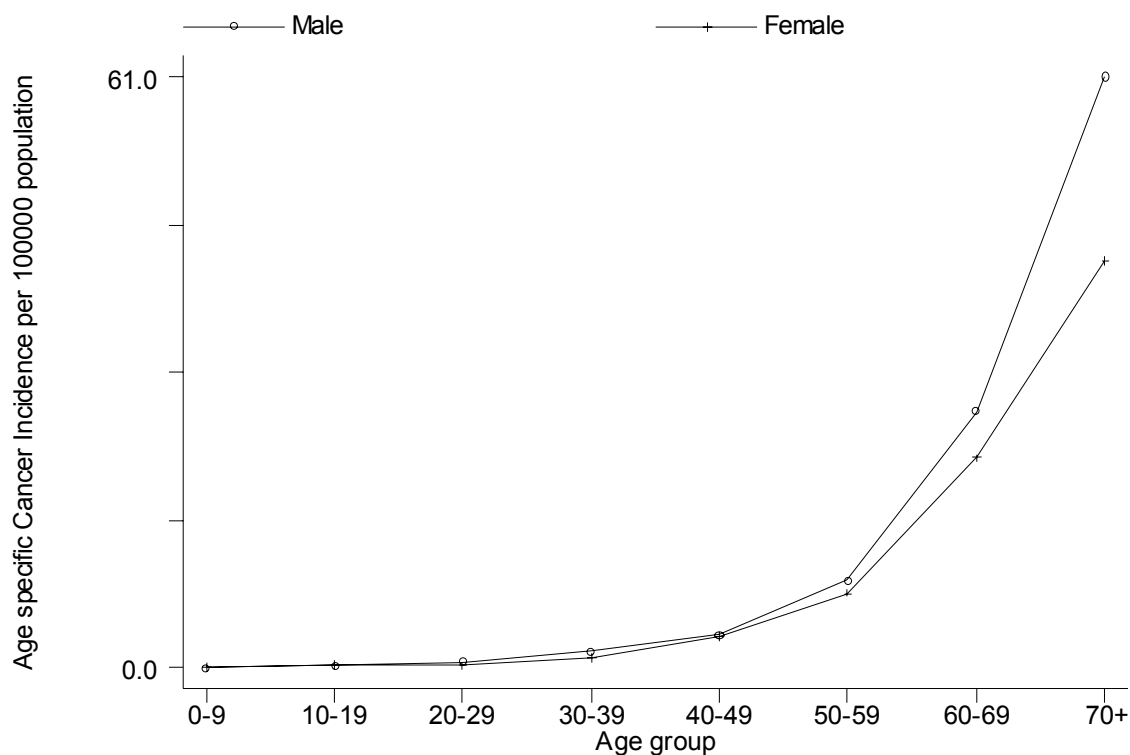


Table 2.16.3: **Other Skin** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003

Ethnic group	Male				Female			
	No.	%	CR	ASR	No.	%	CR	ASR
Malay	126	38.7	2.1	3.6	97	33.1	1.7	2.4
Chinese	182	55.8	6.9	7.7	179	61.1	7.1	6.9
Indian	18	5.5	2	3.2	17	5.8	1.9	2.6

Table 2.16.4: **Other Skin** Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003

		Age groups, year								CumR
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	
Male	Malay	0	0.2	0.6	0.8	1.8	6.6	16.7	34	0.4
	Chinese	0.2	0.2	0.2	3.2	4	11	37.3	76.6	0.7
	Indian	0	0	0.7	0.7	4.3	1.4	9.5	42.4	0.4
Female	Malay	0.1	0.4	0.2	0.8	2.4	5.7	9.6	16.7	0.3
	Chinese	0	0	0.2	1.8	3.9	10.8	36.2	69	0.8
	Indian	0	0.6	0	1.4	2.5	4.3	10.9	20.4	0.3

2.17 MELANOMA

Table 2.17.1: **Melanoma** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003

Sex	No.	%	CR	ASR
Male	35	64.8	0.4	0.5
Female	19	35.2	0.2	0.3
Both	54	100	0.3	0.4

Table 2.17.2: **Melanoma** Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003

Age, year	Male			Female		
	No.	%	CR	No.	%	CR
0-9	0	0	0	0	0	0
10-19	1	2.9	0	0	0	0
20-29	1	2.9	0.1	2	10.5	0.1
30-39	1	2.9	0.1	3	15.8	0.2
40-49	5	14.3	0.4	1	5.3	0.1
50-59	11	31.4	1.5	3	15.8	0.4
60-69	7	20	1.8	7	36.8	1.7
70+	9	25.7	4.1	3	15.8	1.1

Figure 2.17.1: **Melanoma** Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003

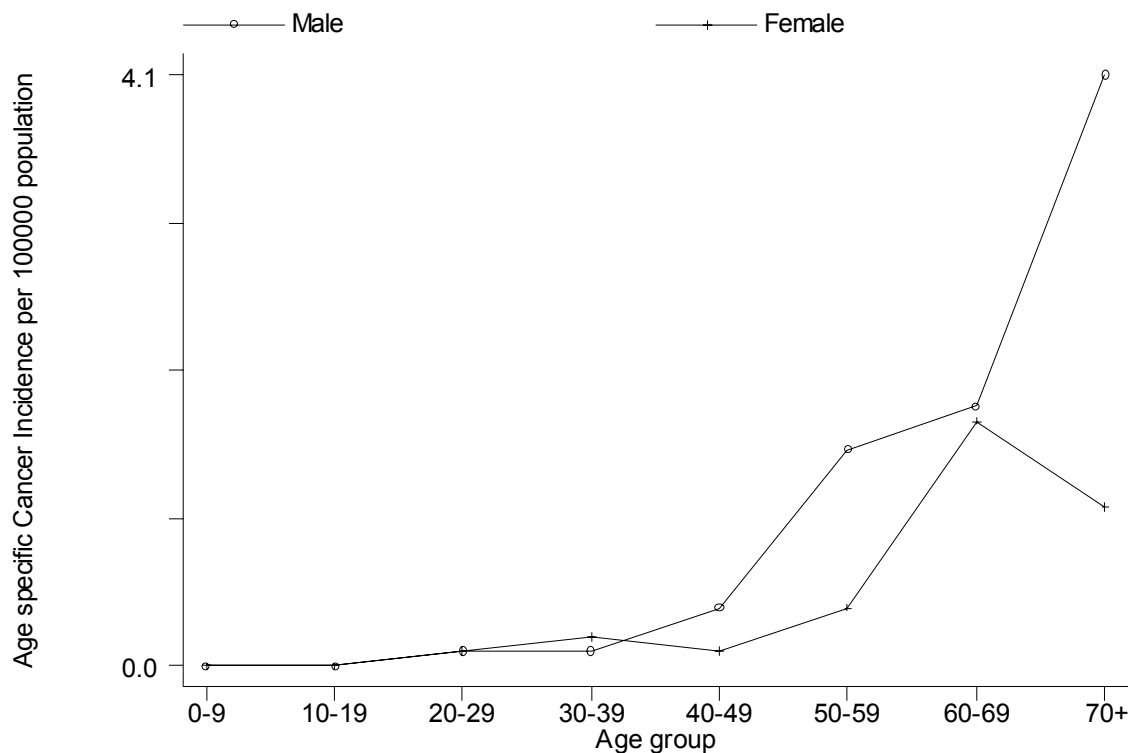


Table 2.17.3: **Melanoma** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003

Ethnic group	Male				female			
	No.	%	CR	ASR	No.	%	CR	ASR
Malay	18	56.3	0.3	0.5	6	33.3	0.1	0.1
Chinese	12	37.5	0.5	0.4	9	50	0.4	0.4
Indian	2	6.3	0.2	0.4	3	16.7	0.3	0.4

Table 2.17.4: **Melanoma** Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003

		Age groups, year								CumR
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	
Male	Malay	0	0.1	0	0.1	0.2	1.5	1.5	5.1	0
	Chinese	0	0	0.2	0	0.8	1.5	1.9	1.2	0.1
	Indian	0	0	0	0	0	1.4	0	6.1	0
Female	Malay	0	0	0.2	0.1	0	0.3	0.9	0	0
	Chinese	0	0	0	0	0	0.8	2.6	2.8	0.1
	Indian	0	0	0	1.4	0	0	2.7	0	0

2.18 FEMALE BREAST

Table 2.18.1: **Female Breast** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), Peninsular Malaysia 2003

Sex	No.	%	CR	ASR
Female	3738	100	39.5	46.2

Table 2.18.2: **Female Breast** Age specific Cancer Incidence per 100,000 population (CR), Peninsular Malaysia 2003

Age, year	Female		
	No.	%	CR
0-9	2	0.1	0.1
10-19	5	0.1	0.3
20-29	39	1	2.5
30-39	457	12.2	34.1
40-49	1255	33.6	111.9
50-59	1141	30.5	159.8
60-69	571	15.3	137.7
70+	268	7.2	97.9

Figure 2.18.1: **Female Breast** Age specific Cancer Incidence per 100,000 population, Peninsular Malaysia 2003

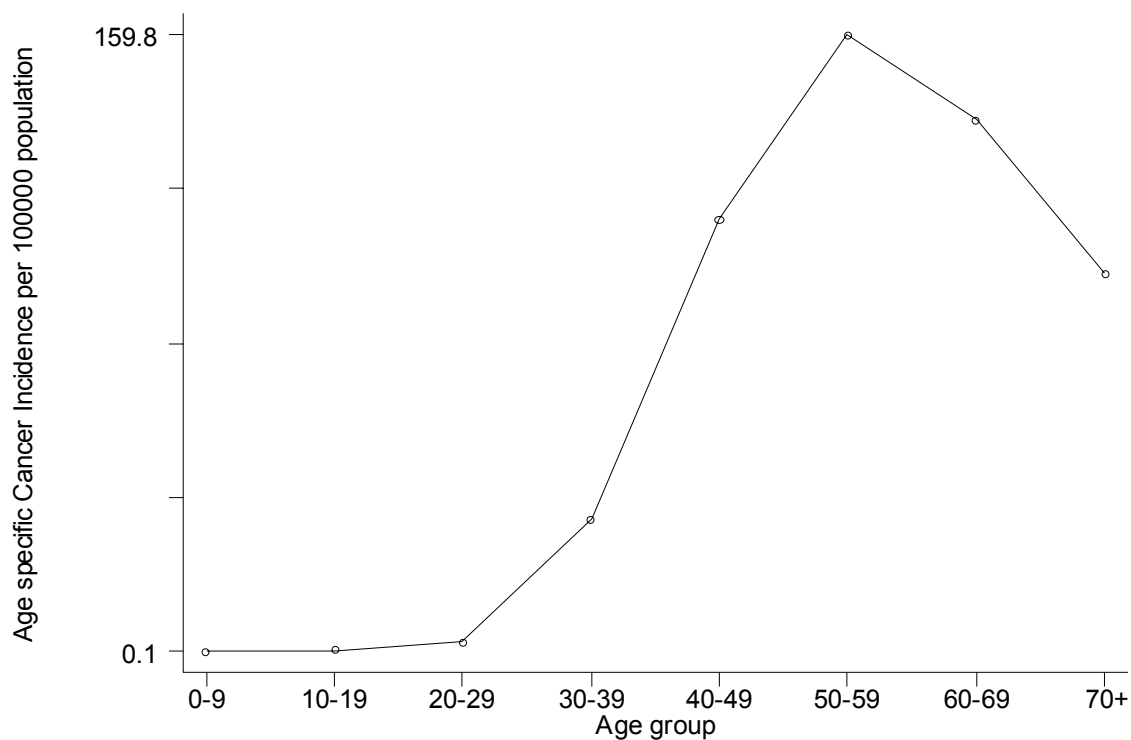


Table 2.18.3: **Female Breast** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity, Peninsular Malaysia 2003

Female				
Ethnic group	No.	%	CR	ASR
Malay	1534	42.9	26.3	33.9
Chinese	1631	45.6	64.8	59.7
Indian	410	11.5	46.4	55.8

Table 2.18.4: **Female Breast** Age specific Cancer Incidence per 100,000 population, by ethnicity, Peninsular Malaysia 2003

		Age groups, year								
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	CumR
Female	Malay	0.1	0.2	2.4	27.7	86.5	125.1	82	61.2	3.5
	Chinese	0	0.2	2.7	45.5	154.1	190.2	188.1	117.5	6.3
	Indian	0	0	2.6	26.5	90.3	204.3	201.1	224.5	6.3

2.19 CERVIX UTERI

Table 2.19.1: **Cervix Uteri** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), Peninsular Malaysia 2003

Sex	No.	%	CR	ASR
Female	1557	100	16.5	19.7

Table 2.19.2: **Cervix Uteri** Age specific Cancer Incidence per 100,000 population (CR), Peninsular Malaysia 2003

Age, year	Female		
	No.	%	CR
0-9	1	0.1	0
10-19	4	0.3	0.2
20-29	27	1.7	1.7
30-39	195	12.5	14.6
40-49	439	28.2	39.1
50-59	413	26.5	57.8
60-69	297	19.1	71.6
70+	181	11.6	66.1

Figure 2.19.1: **Cervix Uteri** Age specific Cancer Incidence per 100,000 population, Peninsular Malaysia 2003

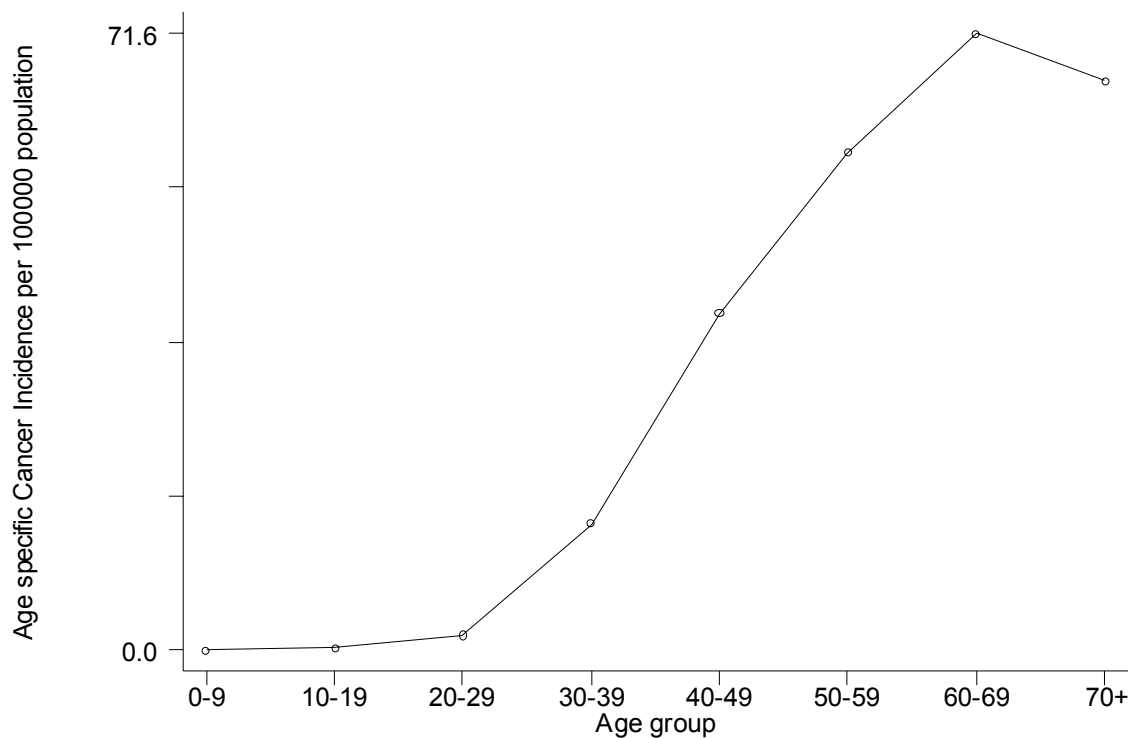


Table 2.19.3: **Cervix Uteri** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity, Peninsular Malaysia 2003

Female				
Ethnic group	No.	%	CR	ASR
Malay	454	32.8	7.8	10.5
Chinese	782	56.4	31.1	28.8
Indian	150	10.8	17	22.4

Table 2.19.4: **Cervix Uteri** Age specific Cancer Incidence per 100,000 population, by ethnicity, Peninsular Malaysia 2003

		Age groups, year								
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	CumR
Female	Malay	0.1	0.1	1.1	7.5	21.2	32	36.6	32.7	1.2
	Chinese	0	0.7	2.7	21.7	63.6	81.9	97	95.1	3.1
	Indian	0	0	0	10	22.6	58.6	127.7	107.1	2.8

2.20 CORPUS UTERI

Table 2.20.1: **Corpus Uteri** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), Peninsular Malaysia 2003

Sex	No.	%	CR	ASR
Female	524	100	5.5	6.9

Table 2.20.2: **Corpus Uteri** Age specific Cancer Incidence per 100,000 population (CR), Peninsular Malaysia 2003

Age, year	Female		
	No.	%	CR
0-9	1	0.2	0
10-19	0	0	0
20-29	8	1.5	0.5
30-39	36	6.9	2.7
40-49	135	25.8	12
50-59	168	32.1	23.5
60-69	123	23.5	29.7
70+	53	10.1	19.4

Figure 2.20.1: **Corpus Uteri** Age specific Cancer Incidence per 100,000 population, Peninsular Malaysia 2003

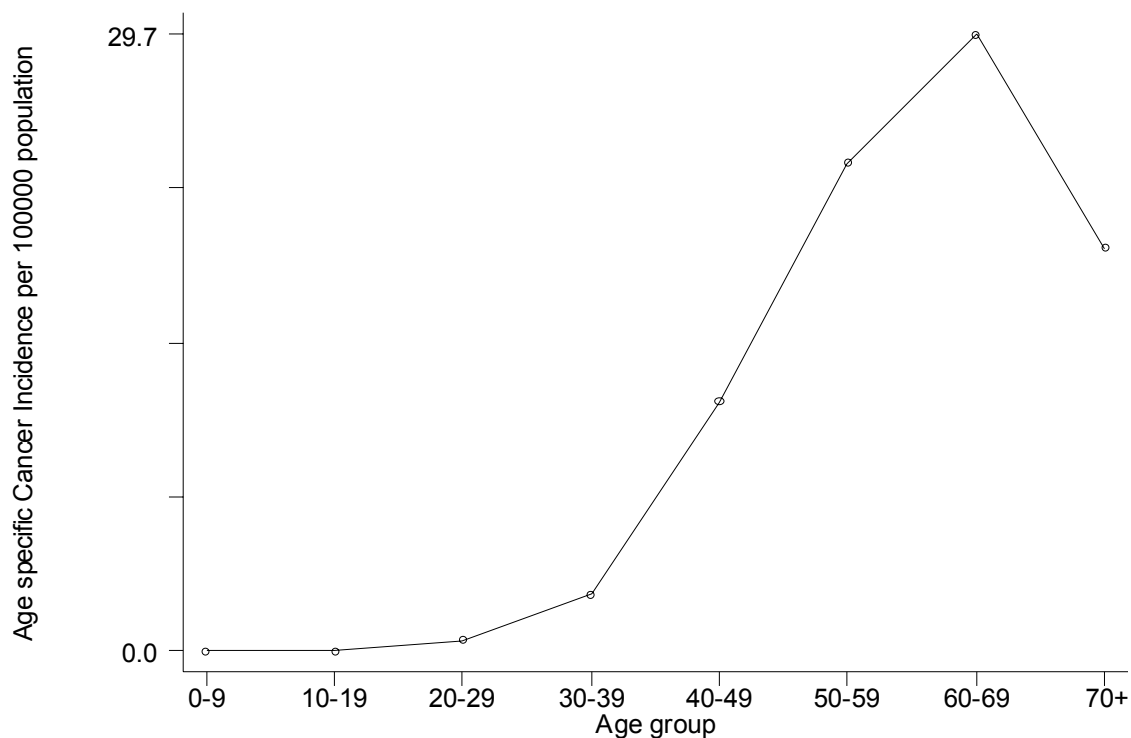


Table 2.20.3: **Corpus Uteri** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity, Peninsular Malaysia 2003

Female				
Ethnic group	No.	%	CR	ASR
Malay	212	42.7	3.6	5
Chinese	221	44.5	8.8	8.3
Indian	64	12.9	7.3	9.5

Table 2.20.4: **Corpus Uteri** Age specific Cancer Incidence per 100,000 population, by ethnicity, Peninsular Malaysia 2003

		Age groups, year								
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	CumR
Female	Malay	0.1	0	0.5	2.2	9.4	17.4	22	10.4	0.6
	Chinese	0	0	0.7	2.6	15.5	31.6	32.3	22.4	0.9
	Indian	0	0	0	4.3	11.7	22.9	51.6	45.9	1.2

2.21 OVARY

Table 2.21.1: **Ovary** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), Peninsular Malaysia 2003

Sex	No.	%	CR	ASR
Female	498	100	5.3	6.1

Table 2.21.2: **Ovary** Age specific Cancer Incidence per 100,000 population (CR), Peninsular Malaysia 2003

Age, year	Female		
	No.	%	CR
0-9	9	1.8	0.4
10-19	15	3	0.8
20-29	38	7.6	2.4
30-39	54	10.8	4
40-49	137	27.5	12.2
50-59	136	27.3	19
60-69	75	15.1	18.1
70+	34	6.8	12.4

Figure 2.21.1: **Ovary** Age specific Cancer Incidence per 100,000 population, Peninsular Malaysia 2003

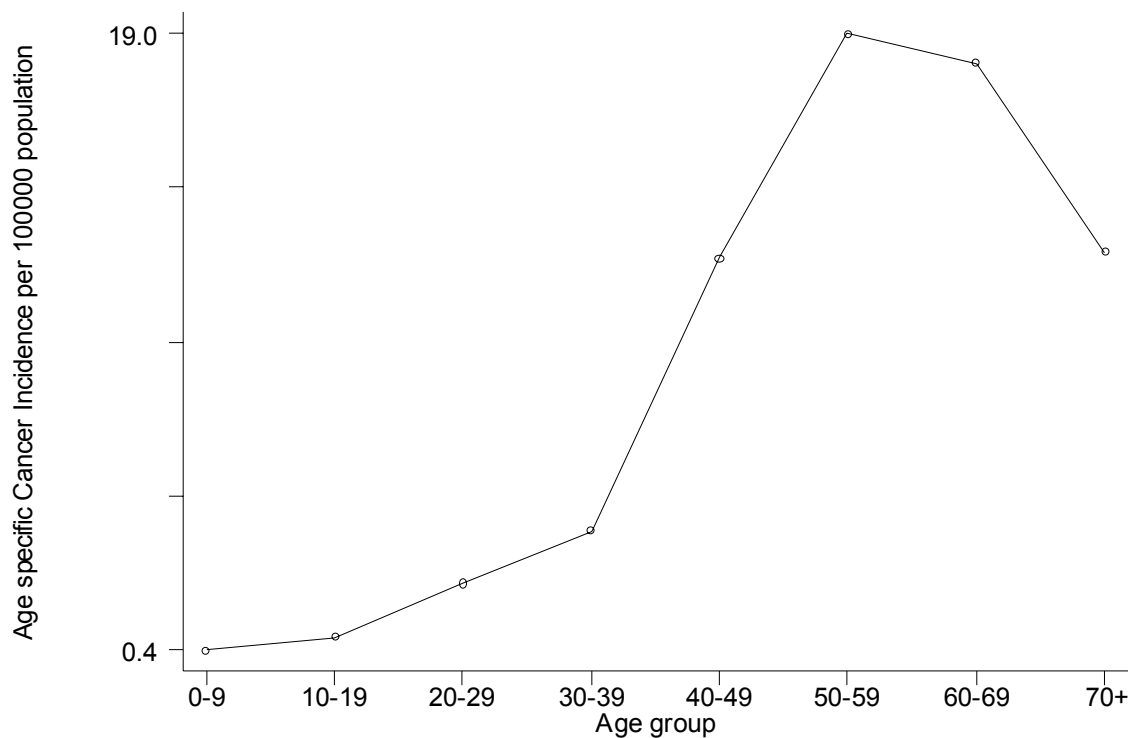


Table 2.21.3: **Ovary** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity, Peninsular Malaysia 2003

Female				
Ethnic group	No.	%	CR	ASR
Malay	227	48.8	3.9	4.9
Chinese	190	40.9	7.5	7.1
Indian	48	10.3	5.4	6.7

Table 2.21.4: **Ovary** Age specific Cancer Incidence per 100,000 population, by ethnicity, Peninsular Malaysia 2003

		Age groups, year								
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	CumR
Female	Malay	0.6	0.8	2.5	3.9	8.9	15.1	12.8	9	0.5
	Chinese	0.2	0.9	2.2	3.1	14.6	24.8	22	14.9	0.8
	Indian	0	0.6	0.7	3.6	11.7	12.9	35.3	25.5	0.7

2.22 PROSTATE

Table 2.22.1: **Prostate** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), Peninsular Malaysia 2003

Sex	No.	%	CR	ASR
Male	602	100	6.2	10.3

Table 2.22.2: **Prostate** Age specific Cancer Incidence per 100,000 population (CR), Peninsular Malaysia 2003

Age, year	Male		
	No.	%	CR
0-9	4	0.7	0.2
10-19	2	0.3	0.1
20-29	1	0.2	0.1
30-39	6	1	0.5
40-49	10	1.7	0.9
50-59	70	11.6	9.4
60-69	208	34.6	52.2
70+	301	50	137.9

Figure 2.22.1: **Prostate** Age specific Cancer Incidence per 100,000 population, Peninsular Malaysia 2003

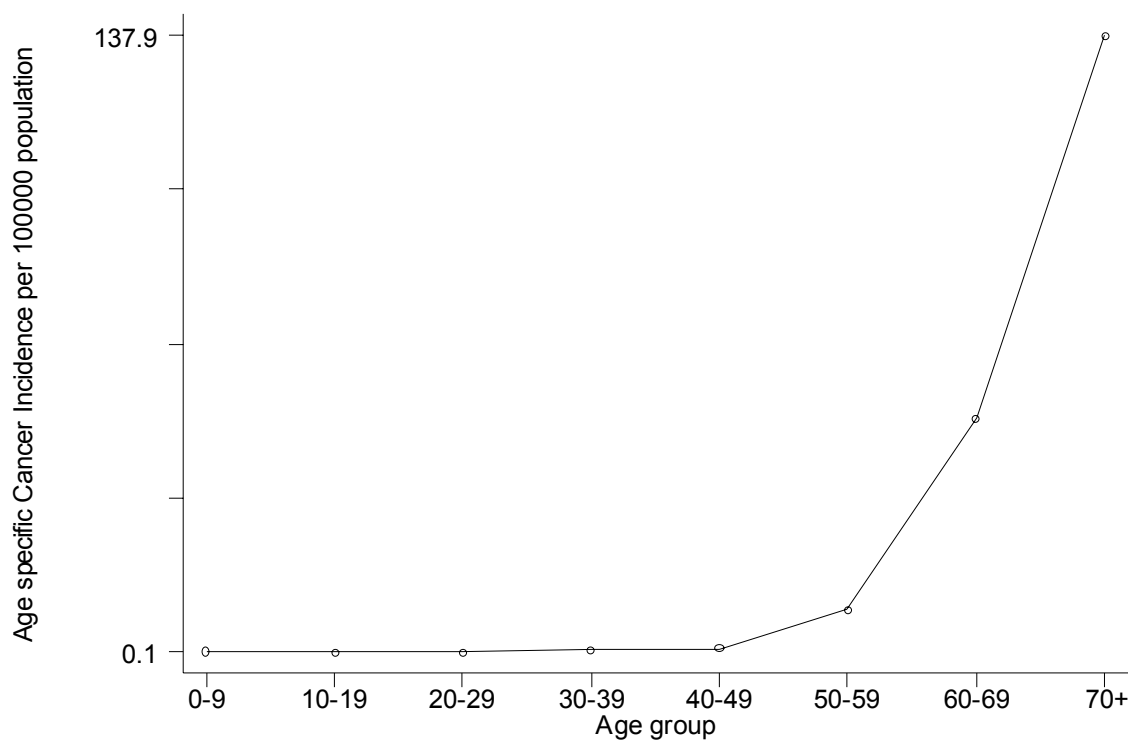


Table 2.22.3: **Prostate** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity, Peninsular Malaysia 2003

Male				
Ethnic group	No.	%	CR	ASR
Malay	214	37.9	3.6	7
Chinese	284	50.3	10.8	13
Indian	67	11.9	7.6	14

Table 2.22.4: **Prostate** Age specific Cancer Incidence per 100,000 population, by ethnicity, Peninsular Malaysia 2003

		Age groups, year								
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	CumR
Male	Malay	0.3	0.1	0	0	0.5	5.1	38.3	91.1	0.9
	Chinese	0	0	0.2	1.2	0.5	11.7	62	180.5	1.5
	Indian	0	0	0	0.7	3.4	17.3	54	200	1.7

2.23 BLADDER

Table 2.23.1: **Bladder** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003

Sex	No.	%	CR	ASR
Male	368	77.1	3.8	5.7
Female	109	22.9	1.2	1.6
Both	477	100	2.5	3.5

Table 2.23.2: **Bladder** Age specific Cancer Incidence per 100,000 population (CR), by sex, Peninsular Malaysia 2003

Age, year	Male			Female		
	No.	%	CR	No.	%	CR
0-9	7	1.9	0.3	5	4.6	0.2
10-19	1	0.3	0	1	0.9	0.1
20-29	2	0.5	0.1	1	0.9	0.1
30-39	8	2.2	0.6	3	2.8	0.2
40-49	32	8.7	2.8	8	7.3	0.7
50-59	90	24.5	12.1	20	18.3	2.8
60-69	90	24.5	22.6	33	30.3	8
70+	138	37.5	63.2	38	34.9	13.9

Figure 2.23.1: **Bladder** Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003

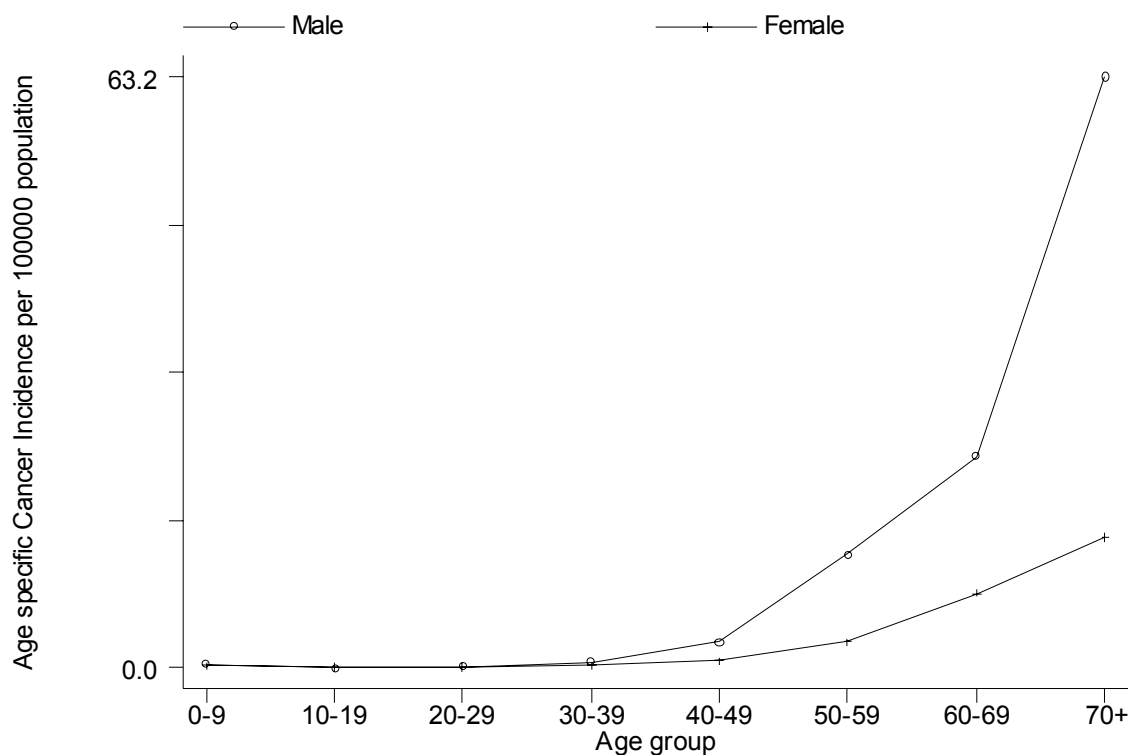


Table 2.23.3: **Bladder** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003

Ethnic group	Male				Female			
	No.	%	CR	ASR	No.	%	CR	ASR
Malay	182	52.6	3.1	5.3	49	47.1	0.8	1.3
Chinese	140	40.5	5.3	6	49	47.1	1.9	1.9
Indian	24	6.9	2.7	4.8	6	5.8	0.7	1

Table 2.23.4: **Bladder** Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003

		Age groups, year								CumR
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	
Male	Malay	0.3	0	0.1	0.5	3.5	11.2	21.1	53.6	0.7
	Chinese	0	0.2	0.2	1	2.2	12.8	19	75.4	0.6
	Indian	0	0	0	0	0	10.1	31.7	42.4	0.7
Female	Malay	0.2	0.1	0	0.1	0.5	2.9	6.4	11.1	0.2
	Chinese	0	0	0.2	0.3	1.1	2.4	11	18.7	0.2
	Indian	0	0	0	0	0.8	2.9	2.7	10.2	0.1

2.24 KIDNEY AND OTHER URINARY ORGANS

Table 2.24.1: **Kidney and Other Urinary Organs** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003

Sex	No.	%	CR	ASR
Male	212	65.2	2.2	3
Female	113	34.8	1.2	1.5
Both	325	100	1.7	2.2

Table 2.24.2: **Kidney and Other Urinary Organs** Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003

Age, year	Male			Female		
	No.	%	CR	No.	%	CR
0-9	26	12.3	1.2	15	13.3	0.7
10-19	1	0.5	0	4	3.5	0.2
20-29	3	1.4	0.2	4	3.5	0.3
30-39	15	7.1	1.1	7	6.2	0.5
40-49	21	9.9	1.9	13	11.5	1.2
50-59	53	25	7.1	19	16.8	2.7
60-69	62	29.2	15.6	30	26.5	7.2
70+	31	14.6	14.2	21	18.6	7.7

Figure 2.24.1: **Kidney and Other Urinary Organs** Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003

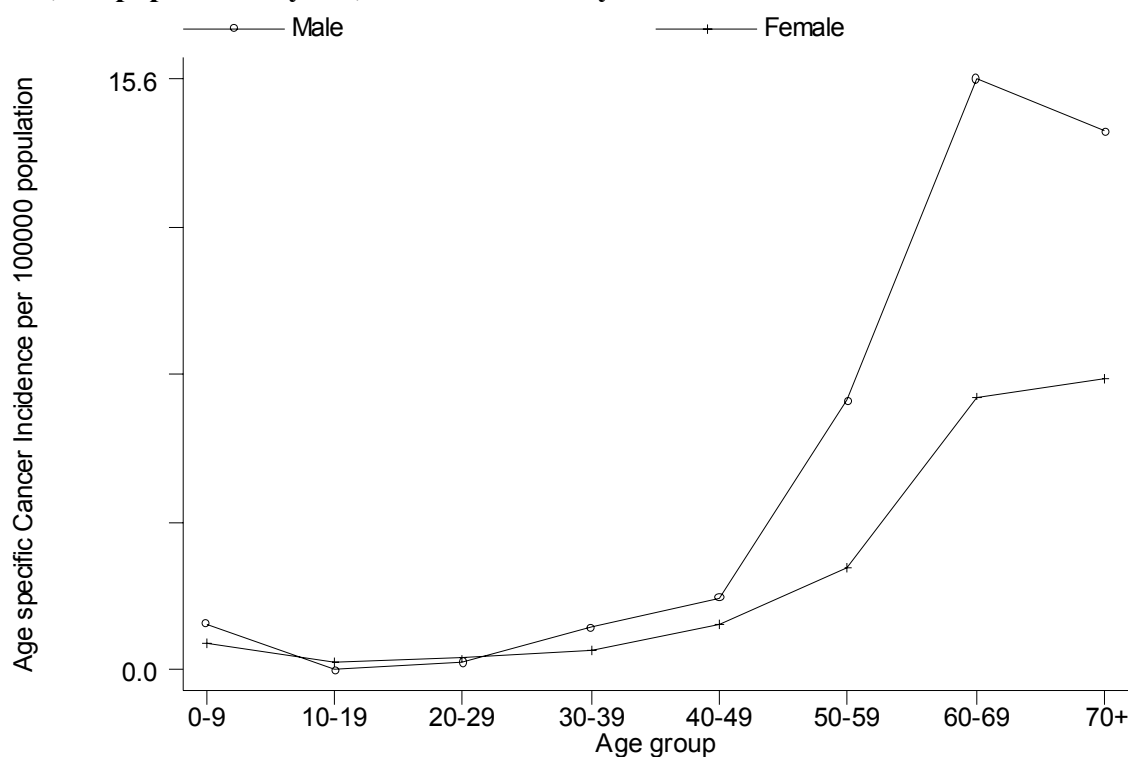


Table 2.24.3: **Kidney and Other Urinary Organs** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003

Ethnic group	Male				Female			
	No.	%	CR	ASR	No.	%	CR	ASR
Malay	78	37.7	1.3	1.9	43	39.4	0.7	1
Chinese	114	55.1	4.3	4.5	55	50.5	2.2	2.1
Indian	15	7.2	1.7	2.5	11	10.1	1.2	1.6

Table 2.24.4: **Kidney and Other Urinary Organs** Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003

		Age groups, year								CumR
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	
Male	Malay	1.3	0	0.1	0.7	1.4	3.8	10.3	6	0.2
	Chinese	1.1	0.2	0	2.5	2.7	11.4	23.4	24.7	0.5
	Indian	0	0	1.3	0	1.7	7.2	12.7	12.1	0.4
Female	Malay	0.8	0.2	0.1	0.4	0.5	1.8	4.6	3.5	0.1
	Chinese	0.2	0.2	0.2	1	2.3	3.6	11	13.1	0.3
	Indian	0.6	0	1.3	0	0.8	4.3	8.2	5.1	0.2

2.25 BRAIN AND OTHER NERVOUS SYSTEM

Table 2.25.1: **Brain and Other Nervous System** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003

Sex	No.	%	CR	ASR
Male	249	53.2	2.6	2.8
Female	219	46.8	2.3	2.5
Both	468	100	2.4	2.6

Table 2.25.2: **Brain and Other Nervous System** Age specific Cancer Incidence per 100,000 population (CR), by sex, Peninsular Malaysia 2003

Age, year	Male			Female		
	No.	%	CR	No.	%	CR
0-9	33	13.3	1.5	32	14.6	1.5
10-19	38	15.3	1.9	31	14.2	1.6
20-29	34	13.7	2.2	26	11.9	1.7
30-39	43	17.3	3.2	36	16.4	2.7
40-49	33	13.3	2.9	26	11.9	2.3
50-59	26	10.4	3.5	36	16.4	5
60-69	29	11.6	7.3	22	10	5.3
70+	13	5.2	6	10	4.6	3.7

Figure 2.25.1: **Brain and Other Nervous System** Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003

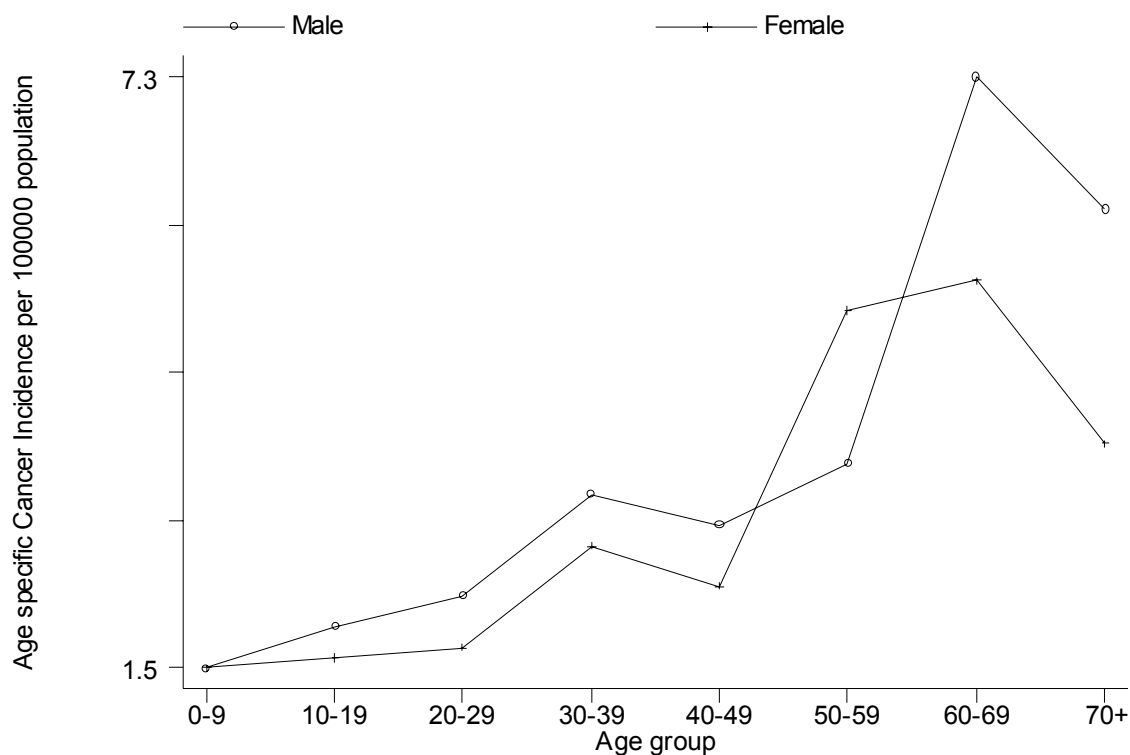


Table 2.25.3: **Brain and Other Nervous System** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003

Ethnic group	Male				Female			
	No.	%	CR	ASR	No.	%	CR	ASR
Malay	136	58.9	2.3	2.6	118	57.8	2	2.2
Chinese	79	34.2	3	3	71	34.8	2.8	2.8
Indian	16	6.9	1.8	2.3	15	7.4	1.7	1.8

Table 2.25.4: **Brain and Other Nervous System** Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003

		Age groups, year								CumR
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	
Male	Malay	1.6	1.3	2.5	2.5	2.7	3.6	7.4	4.3	0.3
	Chinese	1.3	2.6	1.9	3.5	3.2	3.7	7	7.4	0.3
	Indian	0	0.6	0	2.9	3.4	2.9	9.5	12.1	0.3
Female	Malay	1.2	1.2	1.9	2.8	1.7	5.7	4.6	1.4	0.2
	Chinese	2.5	2.1	1.5	2	2.5	4.4	7.8	4.7	0.3
	Indian	0	1.2	0	2.9	3.3	2.9	0	15.3	0.2

2.26 THYROID

Table 2.26.1: **Thyroid** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003

Sex	No.	%	CR	ASR
Male	115	26.4	1.2	1.4
Female	321	73.6	3.4	3.8
Both	436	100	2.3	2.6

Table 2.26.2: **Thyroid** Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003

Age, year	Male			Female		
	No.	%	CR	No.	%	CR
0-9	3	2.6	0.1	2	0.6	0.1
10-19	2	1.7	0.1	13	4	0.7
20-29	10	8.7	0.6	34	10.6	2.2
30-39	16	13.9	1.2	66	20.6	4.9
40-49	31	27	2.7	66	20.6	5.9
50-59	24	20.9	3.2	68	21.2	9.5
60-69	20	17.4	5	38	11.8	9.2
70+	9	7.8	4.1	34	10.6	12.4

Figure 2.26.1: **Thyroid** Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003

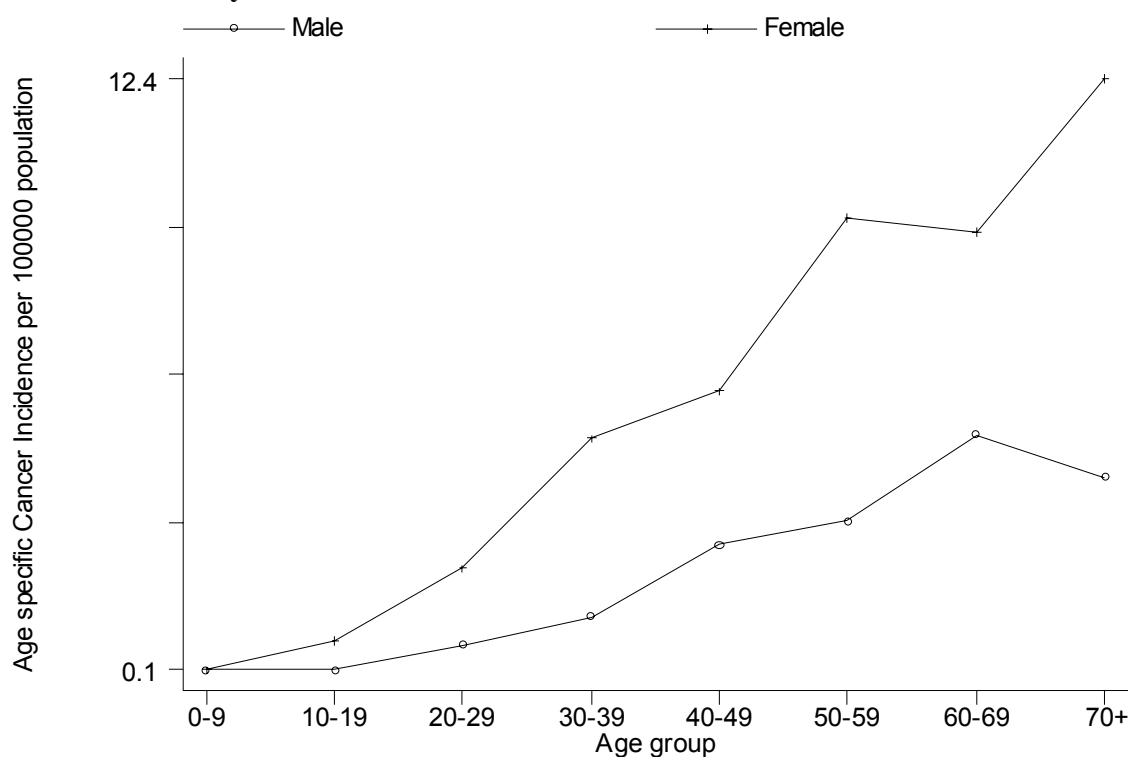


Table 2.26.3: **Thyroid** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003

Ethnic group	Male				Female			
	No.	%	CR	ASR	No.	%	CR	ASR
Malay	58	53.7	1	1.3	189	61	3.2	4
Chinese	36	33.3	1.4	1.3	97	31.3	3.9	3.6
Indian	14	13	1.6	2	24	7.7	2.7	2.8

Table 2.26.4: **Thyroid** Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003

		Age groups, year								CumR
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	
Male	Malay	0.1	0.1	0.6	1.2	2.2	2.8	5.4	3.4	0.1
	Chinese	0	0.2	1	1.5	2.7	2.2	3.8	3.7	0.1
	Indian	0	0	0	0	5.1	7.2	6.3	6.1	0.2
Female	Malay	0.1	0.4	2.5	5.7	6.5	8.8	8.7	14.6	0.4
	Chinese	0	0.9	2	2.8	5.3	10.8	11.6	9.3	0.4
	Indian	0	0.6	1.3	6.4	2.5	8.6	2.7	10.2	0.2

2.27 LYMPHOMA

Table 2.27.1: **Lymphoma** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003

Sex	No.	%	CR	ASR
Male	402	62.6	4.2	5.1
Female	240	37.4	2.5	3
Both	642	100	3.4	4

Table 2.27.2: **Lymphoma** Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003

Age, year	Male			Female		
	No.	%	CR	No.	%	CR
0-9	24	6	1.1	7	2.9	0.3
10-19	39	9.7	1.9	22	9.2	1.1
20-29	38	9.5	2.4	27	11.3	1.7
30-39	40	10	3	26	10.8	1.9
40-49	73	18.2	6.4	39	16.3	3.5
50-59	72	17.9	9.7	43	17.9	6
60-69	65	16.2	16.3	45	18.8	10.9
70+	51	12.7	23.4	31	12.9	11.3

Figure 2.27.1: **Lymphoma** Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003

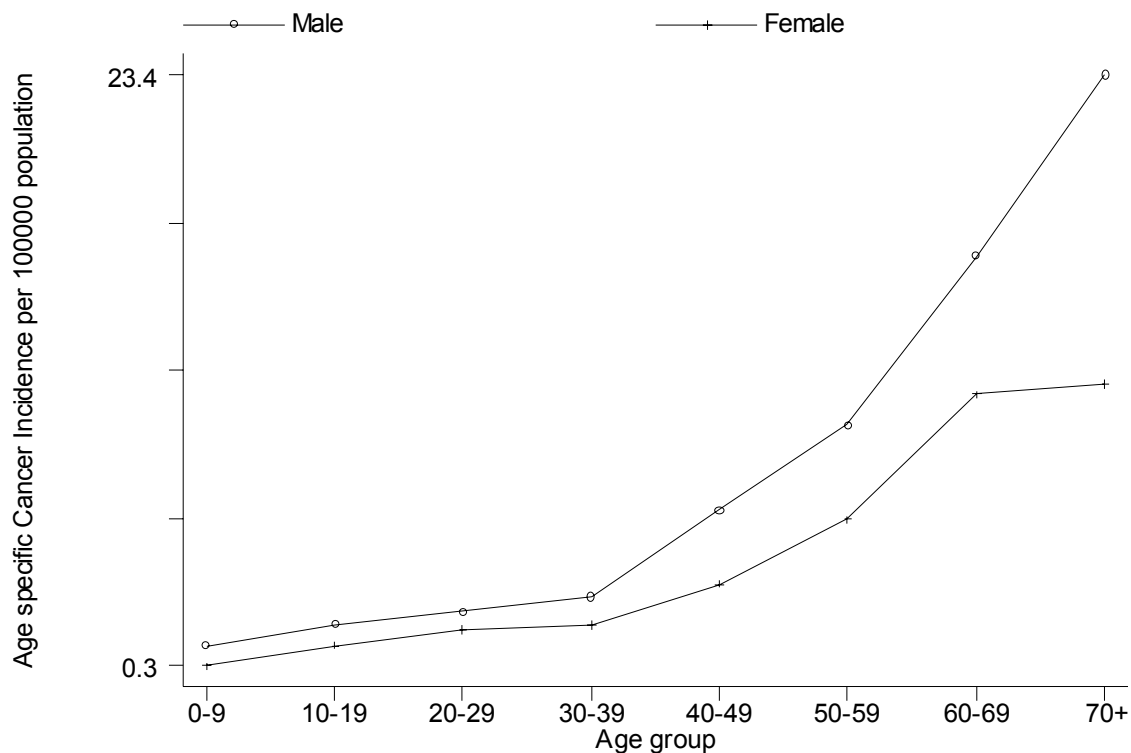


Table 2.27.3: **Lymphoma** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003

Ethnic group	Male				Female			
	No.	%	CR	ASR	No.	%	CR	ASR
Malay	227	59.7	3.8	5.2	126	56	2.2	2.7
Chinese	111	29.2	4.2	4.3	87	38.7	3.5	3.4
Indian	42	11.1	4.8	5.1	12	5.3	1.4	1.3

Table 2.27.4: **Lymphoma** Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003

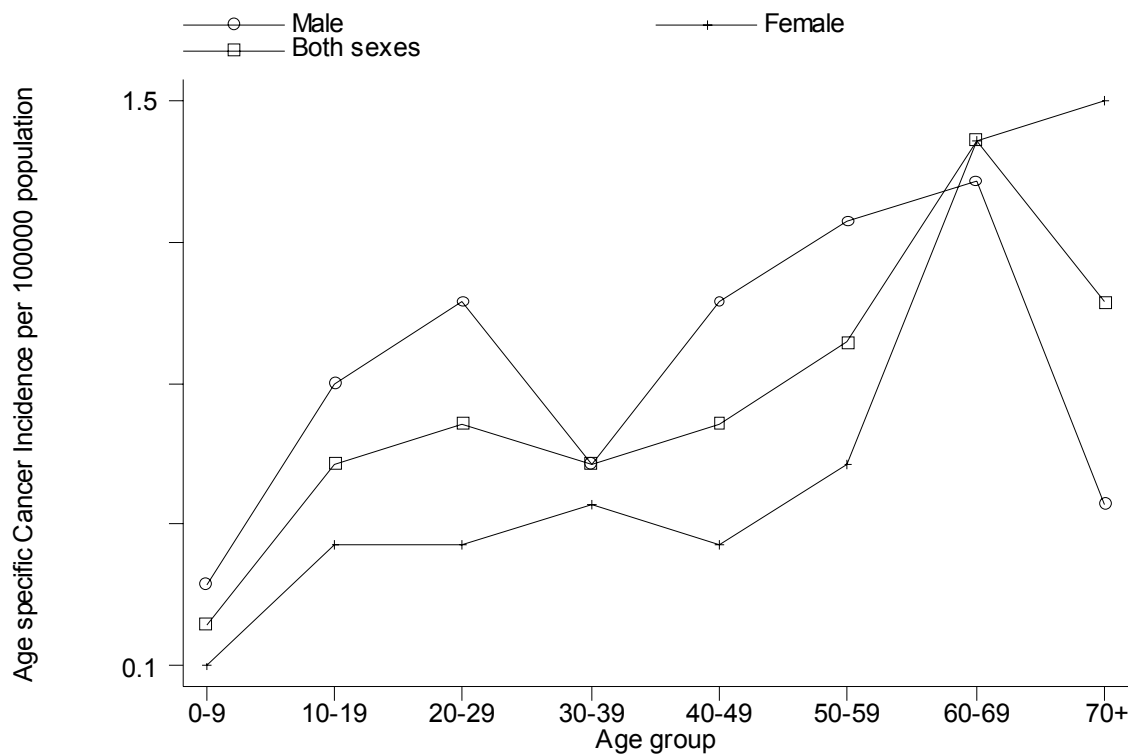
		Age groups, year								CumR
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	
Male	Malay	1	1.7	2.5	2.7	6.6	8.9	20.1	23.8	0.6
	Chinese	1.1	1.8	2.4	2.7	5.1	8.1	13.9	17.3	0.4
	Indian	1.6	2.3	2.6	3.7	11.1	13	6.3	12.1	0.6
Female	Malay	0.4	0.8	1.7	2.2	4	5.7	9.2	7	0.3
	Chinese	0.2	1.2	2.2	1.3	2.3	8	14.2	15.9	0.4
	Indian	0	0.6	0.7	2.1	4.2	0	5.4	0	0.1

2.27.1 Hodgkin's Lymphoma

Table 2.27.1.1: **Hodgkin's Lymphoma** Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003

Age, year	Male			Female			Both		
	No.	%	CR	No.	%	CR	No.	%	CR
0-9	6	8.5	0.3	2	4.9	0.1	8	7.1	0.2
10-19	16	22.5	0.8	8	19.5	0.4	24	21.4	0.6
20-29	15	21.1	1	6	14.6	0.4	21	18.8	0.7
30-39	8	11.3	0.6	7	17.1	0.5	15	13.4	0.6
40-49	11	15.5	1	4	9.8	0.4	15	13.4	0.7
50-59	9	12.7	1.2	4	9.8	0.6	13	11.6	0.9
60-69	5	7	1.3	6	14.6	1.4	11	9.8	1.4
70+	1	1.4	0.5	4	9.8	1.5	5	4.5	1

Figure 2.27.1.1: **Hodgkin's Lymphoma** Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003

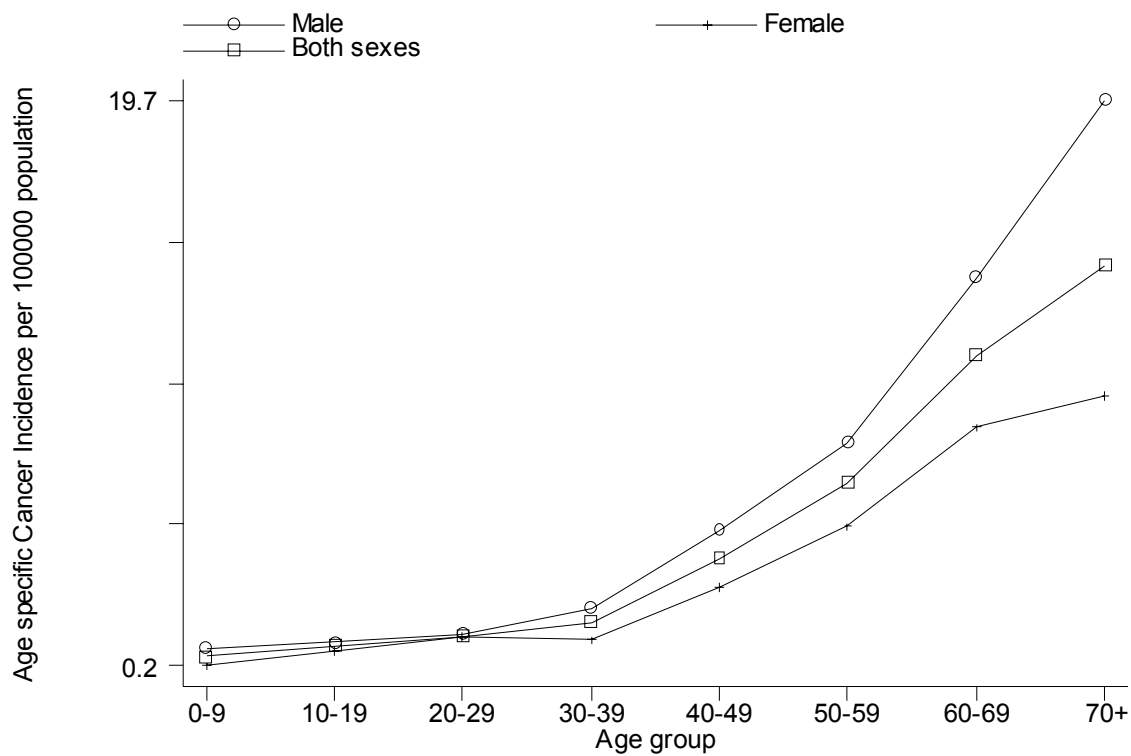


2.27.2 Non Hodgkin's Lymphoma

Table 2.27.2.1: **Non Hodgkin's Lymphoma** Age specific Cancer Incidence per 100,000 population (CR) by sex, Peninsular Malaysia 2003

Age, year	Male			Female			Both		
	No.	%	CR	No.	%	CR	No.	%	CR
0-9	18	6	0.8	5	2.7	0.2	23	4.8	0.5
10-19	21	7	1	13	7.1	0.7	34	7.1	0.9
20-29	20	6.7	1.3	19	10.4	1.2	39	8.1	1.2
30-39	29	9.7	2.2	15	8.2	1.1	44	9.1	1.7
40-49	55	18.4	4.9	33	18.1	2.9	88	18.3	3.9
50-59	59	19.7	7.9	36	19.8	5	95	19.8	6.5
60-69	54	18.1	13.6	35	19.2	8.4	89	18.5	10.9
70+	43	14.4	19.7	26	14.3	9.5	69	14.3	14

Figure 2.27.2.1: **Non Hodgkin's Lymphoma** Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003



2.28 LYMPHATIC LEUKAEMIA

Table 2.28.1: **Lymphatic Leukaemia** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003

Sex	No.	%	CR	ASR
Male	274	63.3	2.8	2.8
Female	159	36.7	1.7	1.7
Both	433	100	2.3	2.2

Table 2.28.2: **Lymphatic Leukaemia** Age specific Cancer Incidence per 100,000 population (CR), by sex, Peninsular Malaysia 2003

Age, year	Male			Female		
	No.	%	CR	No.	%	CR
0-9	149	54.4	6.6	88	55.3	4.2
10-19	63	23	3.1	33	20.8	1.7
20-29	18	6.6	1.1	8	5	0.5
30-39	10	3.6	0.8	7	4.4	0.5
40-49	14	5.1	1.2	8	5	0.7
50-59	10	3.6	1.3	9	5.7	1.3
60-69	8	2.9	2	4	2.5	1
70+	2	0.7	0.9	2	1.3	0.7

Figure 2.28.1: **Lymphatic Leukaemia** Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003

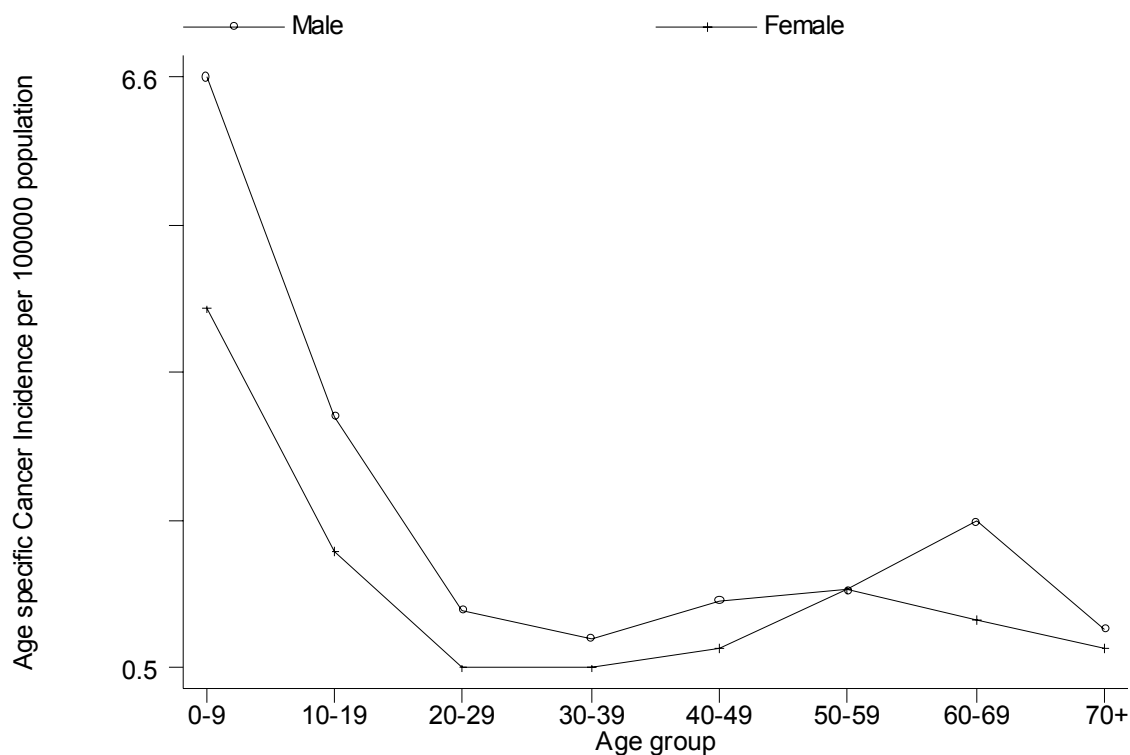


Table 2.28.3: **Lymphatic Leukaemia** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003

Ethnic group	Male				Female			
	No.	%	CR	ASR	No.	%	CR	ASR
Malay	189	70.3	3.2	2.9	112	71.3	1.9	1.8
Chinese	52	19.3	2	2.2	30	19.1	1.2	1.2
Indian	28	10.4	3.2	3.3	15	9.6	1.7	1.8

Table 2.28.4: **Lymphatic Leukaemia** Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003

		Age groups, year								CumR
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	
Male	Malay	6.6	3.9	1.3	0.7	1.1	1.5	2	0.9	0.2
	Chinese	6.3	0.9	1	0.7	1.1	1.1	1.9	1.2	0.1
	Indian	8.7	2.9	1.3	0.7	1.7	1.4	3.2	0	0.2
Female	Malay	5.2	1.8	0.3	0.4	0.2	1	0.9	0.7	0.1
	Chinese	2.1	1.4	1	0.8	1.1	0.8	0.6	0.9	0.1
	Indian	2.3	2.4	0.7	0	1.7	4.3	2.7	0	0.1

2.29 MYELOID LEUKAEMIA

Table 2.29.1: **Myeloid Leukaemia** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by sex, Peninsular Malaysia 2003

Sex	No.	%	CR	ASR
Male	286	53.1	3	3.2
Female	253	46.9	2.7	2.8
Both	539	100	2.8	3

Table 2.29.2: **Myeloid Leukaemia** Age specific Cancer Incidence per 100,000 population (CR), by sex, Peninsular Malaysia 2003

Age, year	Male			Female		
	No.	%	CR	No.	%	CR
0-9	67	23.4	3	44	17.4	2.1
10-19	38	13.3	1.9	37	14.6	1.9
20-29	30	10.5	1.9	33	13	2.1
30-39	45	15.7	3.4	35	13.8	2.6
40-49	40	14	3.5	36	14.2	3.2
50-59	21	7.3	2.8	27	10.7	3.8
60-69	32	11.2	8	26	10.3	6.3
70+	13	4.5	6	15	5.9	5.5

Figure 2.29.1: **Myeloid Leukaemia** Age specific Cancer Incidence per 100,000 population by sex, Peninsular Malaysia 2003

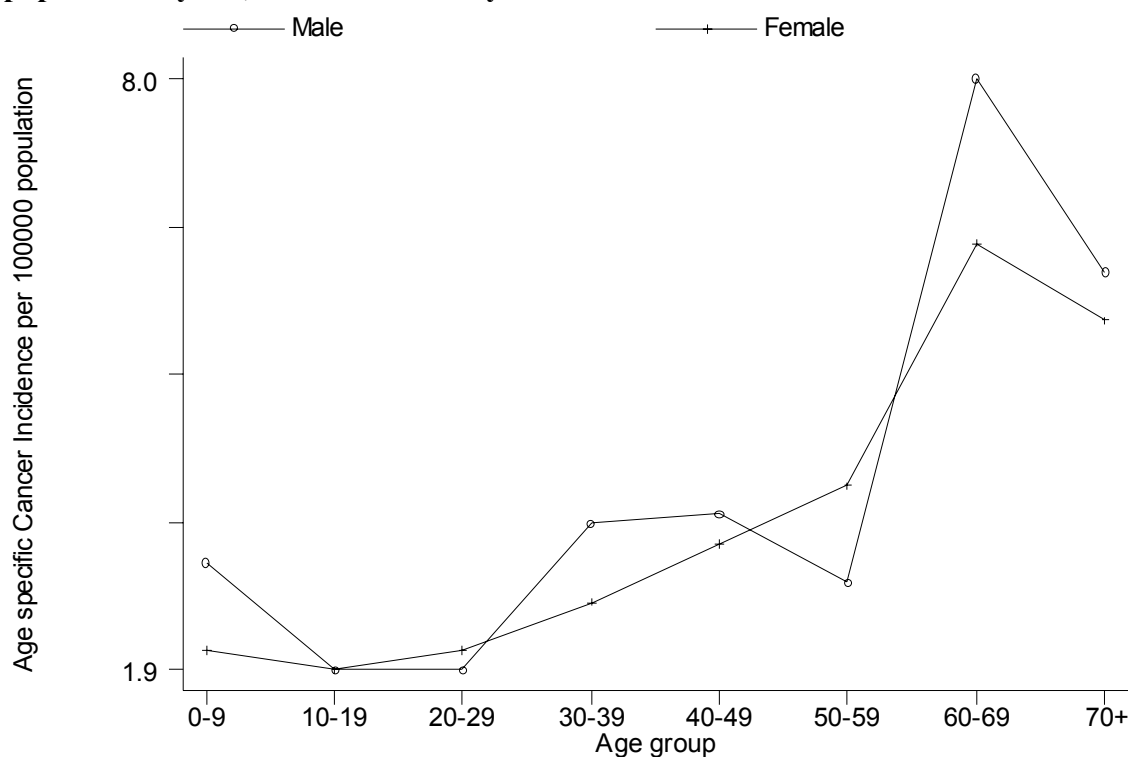


Table 2.29.3: **Myeloid Leukaemia** Cancer Incidence per 100,000 population (CR) and Age-standardized incidence (ASR), by ethnicity and sex, Peninsular Malaysia 2003

Ethnic group	Male				Female			
	No.	%	CR	ASR	No.	%	CR	ASR
Malay	170	63.4	2.9	3.1	143	60.1	2.4	2.7
Chinese	71	26.5	2.7	2.6	70	29.4	2.8	2.7
Indian	27	10.1	3.1	3.6	25	10.5	2.8	3.1

Table 2.29.4: **Myeloid Leukaemia** Age specific Cancer Incidence per 100,000 population, by ethnicity and sex, Peninsular Malaysia 2003

		Age groups, year								CumR
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	
Male	Malay	3.2	2	1.9	2.8	3.8	2.8	8.4	2.6	0.3
	Chinese	0.6	1.3	1.7	4.7	3.5	2.6	5.7	8.7	0.3
	Indian	4.3	0.6	2	2.9	2.6	4.3	12.7	6.1	0.3
Female	Malay	2.3	1.5	2.5	1.9	2.9	4.4	6	2.8	0.2
	Chinese	1.4	1.7	2	3.8	2.8	2.8	6.5	6.5	0.3
	Indian	0.6	4.2	0	1.4	5.9	4.3	8.2	10.2	0.3

REFERENCES

1. Boyle P, Parkin DM. Statistical methods for registries. In: Jensen OM, Parkin DM et al. (Eds). Cancer Registration Principles and Methods. IARC Scientific Publications No. 95. Lyon 1991
2. Doll R, Payne P, Waterhouse JAH. Cancer Incidence in Five Continents, Volume 1, Geneva, UICC; Berlin, Springer
3. Parkin DM, Chen VW, Ferlay J, Galceran J, Storm HH, Whelan SL. Comparability and Quality Control in Cancer Registration. IARC Technical Report No. 19. Lyon 1994
4. Whelan SL, Parkin DM, Masuyer E. Patterns of Cancer in Five Continents. IARC Scientific Publications No. 102. Lyon 1990
5. Chia KS, Seow A, Lee HP, Shanmugaratnam K. Cancer Incidence in Singapore 1993-1997. Singapore Cancer Registry, Report No. 5, 2000.
6. Parkin DM, Whelan SL, Ferlay J, Raymond L, Young J. Cancer Incidence in Five Continents, Volume VII. IARC Scientific Publications No. 143. Lyon 1997
7. Globocan 2002, <http://www-dep.iarc.fr/>
8. Zariah M.Z., Mohd. Yusoff H., Devaraj T., Rokiah M., Aishah K., Rafidah M.N., Chan C.K., Nor Asikin A.K. Penang Cancer Registry Report 1994-1998. Penang Cancer Registry (2003)

APPENDICES

Table A1: New cases of cancer and percentage of total number of cases by site, age and sex, Peninsular Malaysia 2003

Site		Age groups, year															Total	Tot-%	
		0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-			75+
LIP	Male										3	5	3	4	1	1	17	0.2	
LIP	Female							1	2		1	1	5	4	2	2	18	0.1	
TONGUE	Male					1	2	2	11	9	9	12	15	13	25	10	16	125	1.3
TONGUE	Female					1	2	3	6	8	10	13	6	6	22	7	14	98	0.8
SALIVARY GLANDS	Male	1	1		3	1	4	3		4	11	5	6	4	6	5	7	61	0.7
SALIVARY GLANDS	Female		1	1	4	2	2	1	3	9	4	9	6	4	6	1	4	57	0.5
GUM, MOUTH, OTHERS	Male		1	1		1	6	2	4	7	16	12	14	12	18	11	9	114	1.2
GUM, MOUTH, OTHERS	Female			1	1		1	2	5	5	9	20	22	20	29	19	14	148	1.2
OROPHARYNX	Male				1			1		4	3	8	12	8	12	7	6	62	0.7
OROPHARYNX	Female					1	1		3	1	2	1	1	3	1	3	4	21	0.2
NASOPHARYNX	Male	2		8	5	15	22	40	70	132	139	100	120	61	62	25	24	825	8.8
NASOPHARYNX	Female	1		4	3	5	8	18	41	33	43	42	38	27	20	10	7	300	2.5
HYPOPHARYNX	Male					2			1	1	2	2	2	8	7	7	5	37	0.4
HYPOPHARYNX	Female								1	2	2	3	1	4		1	1	15	0.1
OTHER PHARYNX	Male				1	1	1	1	3	3	5	6	9	5	10	5	3	53	0.6
OTHER PHARYNX	Female		1	2			1		1	2	1	5	2	2	4	3	1	25	0.2
ESOPHAGUS	Male					2		4	1	9	21	11	25	44	23	31	26	197	2.1
ESOPHAGUS	Female				1				4	2	13	15	14	17	14	16	14	110	0.9
STOMACH	Male		2		1	4	7	12	14	25	36	40	57	69	73	58	78	476	5.1
STOMACH	Female		1	2	1	1	1	10	12	13	40	27	47	39	43	44	69	350	2.9
SMALL INTESTINE	Male		2				3	4	2	3	6	6	8	6	6	6	5	57	0.6
SMALL INTESTINE	Female					1	1	4	2	3	2	5	9	6	3	4	1	41	0.3
Caecum	Male			1	1	1			1	4		3	6	6	1	7	6	37	0.4
Caecum	Female			2		1	1			2	4	6	7	6	9	6	14	58	0.5
Appendix	Male			1	2	1		2	1	2	1			1				11	0.1
Appendix	Female				1	3		1		2	1		1	1	2		2	14	0.1
Ascending colon	Male											1	1	3	3	4	4	16	0.2
Ascending colon	Female						1		2	1	1	1	1	2	3	1	2	15	0.1
Hepatic flexure of colon	Male									1				2	1		3	7	0.1
Hepatic flexure of colon	Female										1	2		2	2			7	0.1
Transverse colon	Male							1	1			3	2	1	2	2	6	18	0.2

Site		Age groups, year															Total	Tot- %	
		0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-			75+
Transverse colon	Female							1		3			3	1	4	1	1	14	0.1
Splenic flexure of colon	Male										1					2	2	5	0.1
Splenic flexure of colon	Female								1			2					1	4	0
Descending colon	Male									1	1	1	1	1	4	4	2	12	0.1
Descending colon	Female					1				2	5	1	2	3	1	5	20	0.2	
Sigmoid colon	Male			1		1	2	2	3	5	9	7	16	22	22	18	13	121	1.3
Sigmoid colon	Female				1		1	1	5	4	6	16	14	16	18	11	23	116	1
Other colon	Male		1	1	1	2	6	11	14	21	39	50	57	74	74	64	76	491	5.2
Other colon	Female	1			1	5	6	12	17	26	40	65	61	58	58	67	63	480	4
Rectosigmoid junction	Male						2	1		3	9	17	8	11	20	5	15	91	1
Rectosigmoid junction	Female					1				6	9	8	9	8	11	8	9	69	0.6
Rectum	Male				1	4	8	10	14	24	42	46	74	75	91	56	68	513	5.5
Rectum	Female				1	3	2	13	20	25	28	40	44	65	54	45	70	410	3.4
RECTUM	Male		1							1	1		2	2		3	3	13	0.1
RECTUM	Female									1	1	3	3	2				10	0.1
Anal canal	Male					2						2	1	1	4	4	14	0.1	
Anal canal	Female		1			1				1	1	2	1	2	3	2	6	20	0.2
Anorectal /Anus	Male							1	1		1		2	2	2	1	2	12	0.1
Anorectal /Anus	Female						1			1		4	2	5	1	2	4	20	0.2
LIVER/ Intra-BILE DUCTS	Male	2	4	3	1	3	4	6	12	23	36	41	63	59	52	32	37	378	4
LIVER/ Intra-BILE DUCTS	Female	3	1	3		3		4	2	6	13	13	21	21	30	14	18	152	1.3
GALLBLADDER/Extra-BILE DUCT	Male						1	4	3	4	3	12	16	11	12	7	8	81	0.9
GALLBLADDER/Extra-BILE DUCT	Female						1	4	2	5	6	10	6	11	13	11	8	77	0.6
PANCREAS	Male			2				1	2	4	6	17	19	17	14	12	19	113	1.2
PANCREAS	Female		1	1	1	2	1	1	3	4	6	7	9	14	8	8	15	81	0.7
OTHER DIGESTIVE ORGANS	Male	1		1		1		4		1	6	1	7	9	6	3	5	45	0.5
OTHER DIGESTIVE ORGANS	Female			2			1		1	1	6	4	10	4	2	4	6	41	0.3
NASAL, SINUSES, EAR	Male	2	1	1	2		2	2	7	9	6	8	12	11	8	9	12	92	1
NASAL, SINUSES, EAR	Female				1		1	1	2	4	4	2	7	7	6	2	6	43	0.4
LARYNX	Male	1		1		1	2		7	5	13	22	22	51	23	32	26	206	2.2
LARYNX	Female	1								1	1	4	1	5	5	3	8	29	0.2
TRACHEA, BRONCHUS AND LUNG	Male	1	1	7	4	6	13	6	21	41	82	115	176	218	247	191	169	1298	13.9
TRACHEA, BRONCHUS AND	Female			2	2		5	2	13	22	42	54	57	74	68	53	66	460	3.8

Site	Age groups, year																Total	Tot- %	
	0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75+			
LUNG																			
PLEURA	Male								2	2		1	1	1	1			8	0.1
PLEURA	Female					1	1					3	1	1	1	1		9	0.1
THYMUS/HEART/MEDIASTINUM	Male					3			2	1	1	1		1	4	1		14	0.1
THYMUS/HEART/MEDIASTINUM	Female	1	1						1								1	4	0
BONES and JOINTS	Male	2	3	15	13	8	5	6	9	7	8	6	4		4	4	3	97	1
BONES and JOINTS	Female	1	3	13	15	12	4	4	5	3	4	2	4	3	3	2	1	79	0.7
CT/ SUBCUT./SOFT TISSUES	Male	13	8	5	9	5	7	4	5	16	12	7	9	7	10	5	11	133	1.4
CT/ SUBCUT./SOFT TISSUES	Female	10	6	5	6	4	8	7	7	10	9	7	7	11	7	3	8	115	1
Basal cell carcinoma	Male						2	1	4	7	10	11	22	27	30	19	45	178	1.9
Basal cell carcinoma	Female		1	1					5	5	18	17	17	29	40	30	38	201	1.7
Squamous cell carcinoma	Male				2	1	1	3	7	3	10	10	14	18	22	21	33	145	1.5
Squamous cell carcinoma	Female			1	1			2	3	2	7	4	8	7	10	10	27	82	0.7
Cutaneous melanomas	Male			1		1		1		3	2	6	5	3	4	2	7	35	0.4
Cutaneous melanomas	Female					2		2	1		1	2	1	2	5	2	1	19	0.2
Skin appendage carcinomas	Male						1	1			2	2	1		1	1		9	0.1
Skin appendage carcinomas	Female								1	1		1	3			1	1	8	0.1
Dermatofibrosarcomas/Merkel	Male	1		1			2	1	1	3	2	1					3	15	0.2
Dermatofibrosarcomas/Merkel	Female				3	1	1		2		2		1	1		2		13	0.1
Kaposi's sarcoma	Male				1				1	1						1		4	0
Kaposi's sarcoma	Female															1	1	2	0
Other skin/soft tissue sarcoma	Male							1						1	1	1		4	0
Other skin/soft tissue sarcoma	Female					1	2		1	1			3	1	2	2	2	15	0.2
Mycosis fungoides/skin lymphom	Male						1		1	1				2	2	2	2	6	0
Mycosis fungoides/skin lymphom	Female		1				1		1	1				2				6	0
OTHER SKIN **	Male										1	2	1	1	3	2		10	0.1
OTHER SKIN **	Female								1			3	1	1		2	2	10	0.1
FEMALE BREAST	Male																		
FEMALE BREAST	Female	1	1	1	4	10	29	138	319	540	715	645	496	335	236	140	128	3738	31
MALE BREAST	Male		1					2	2	1	1	4	2	6	3		2	24	0.3
MALE BREAST	Female																		
CERVIX UTERI	Male																		
CERVIX UTERI	Female	1		2	2	5	22	61	134	198	241	221	192	175	122	82	99	1557	12.9
PLACENTA	Male																		
PLACENTA	Female				3	1		1		2	1	1	1	1				12	0.1
CORPUS UTERI	Male																		

Site		Age groups, year															Total	Tot-%	
		0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-			75+
CORPUS UTERI	Female	1				2	6	8	28	53	82	79	89	68	55	23	30	524	4.3
OVARY	Male																		
OVARY	Female	2	7	4	11	11	27	20	34	57	80	76	60	41	34	19	15	498	4.1
FALLOPIAN, LIGAMENT, ADNEXA	Male																		
FALLOPIAN, LIGAMENT, ADNEXA	Female						1		3	2	1	3	3	1	1		1	16	0.1
VAGINA	Male																		
VAGINA	Female								1	4	5	6	5	2	6	3	4	36	0.3
VULVA	Male																		
VULVA	Female								1	2	1	2	3	2	5	2	4	22	0.2
PROSTATE GLAND	Male	2	2	1	1	1		2	4	4	6	12	58	88	120	135	166	602	6.4
PROSTATE GLAND	Female																		
TESTIS	Male	11	1	1	2	4	10	8	12	6	8	5	5	3	6	7	7	96	1
TESTIS	Female																		
PENIS/ OTHER MALE GENITAL	Male				1	2		1	2	2	4		5	2	1	5	2	27	0.3
PENIS/ OTHER MALE GENITAL	Female																		
URINARY BLADDER	Male	7			1		2	1	7	13	19	41	49	50	40	58	80	368	3.9
URINARY BLADDER	Female	5		1			1		3	4	4	7	13	23	10	17	21	109	0.9
KIDNEY	Male	21	5	1		2	1	5	10	11	9	28	21	38	21	19	11	203	2.2
KIDNEY	Female	8	7	2	1	2	2	1	5	4	8	10	8	13	13	9	9	102	0.8
OTHER URINARY	Male										1	2	2	2	1		1	9	0.1
OTHER URINARY	Female			1					1		1		1	2	2	1	2	11	0.1
EYE/LACRIMAL GLAND	Male	17	1	4		3	3	1	1	1		1	1	1			1	35	0.4
EYE/LACRIMAL GLAND	Female	18	1		2	1	1		2	1	1	1						28	0.2
BRAIN	Male	13	17	25	13	12	17	22	16	18	8	14	11	13	15	12		226	2.4
BRAIN	Female	13	19	17	12	14	11	14	18	11	11	12	18	6	10	5	3	194	1.6
OTHER CNS	Male	1	2			4	1	1	4	2	5	1		1		1		23	0.2
OTHER CNS	Female				2		1	1	3	3	1	2	4	2	4	1	1	25	0.2
THYROID GLAND	Male	2	1		2	4	6	5	11	10	21	10	14	13	7	3	6	115	1.2
THYROID GLAND	Female	1	1	6	7	13	21	37	29	40	26	34	34	18	20	19	15	321	2.7
OTHER ENDOCRINE	Male	8	3	6	5	3		1	4	3	5	3	1	1	3	2		48	0.5
OTHER ENDOCRINE	Female	10	6		1	2	1	4		2	2			1	1			30	0.2
Hodgkin's disease	Male	1	5	6	10	8	7	3	5	4	7	5	4	3	2	1		71	0.8
Hodgkin's disease	Female	1	1	1	7	4	2	4	3	2	2	2	2	2	4	1	3	41	0.3
Non-Hodgkin's lymphoma	Male	9	9	7	14	12	8	13	16	26	29	33	26	28	26	25	18	299	3.2

Site		Age groups, year															Total	Tot- %	
		0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-			75+
Non-Hodgkin's lymphoma	Female		5	10	3	11	8	6	9	13	20	17	19	13	22	16	10	182	1.5
Lymphatic leukaemia	Male	90	59	42	21	10	8	6	4	7	7	4	6	1	7	2		274	2.9
Lymphatic leukaemia	Female	47	41	28	5	4	4	1	6	4	4	6	3	1	3	2		159	1.3
Myeloid leukaemia	Male	38	29	19	19	15	15	24	21	21	19	10	11	15	17	7	6	286	3.1
Myeloid leukaemia	Female	19	25	21	16	14	19	19	16	15	21	18	9	12	14	7	8	253	2.1
Other leukaemia	Male	18	8	9	6	1	5	3	3	4	4	7	5	8	6	9	7	103	1.1
Other leukaemia	Female	6	5	5	5	4	1	1	2	3	3	9	4	4	6	5	4	67	0.6
Myeloma/Immunoproliferative	Male	5	1			1	2	4		2	3	7	16	9	6	10	1	67	0.7
Myeloma/Immunoproliferative	Female	2	1	1	1		2	4		2	1	4	7	11	7	3	2	48	0.4
HEMATOPOIETIC/ RE	Male	2						1		1				1			1	6	0.1
HEMATOPOIETIC/ RE	Female		1															1	0
UNKNOWN PRIMARY SITES	Male								1	1		1				1		4	0
UNKNOWN PRIMARY SITES	Female							1						1	1			3	0

Note:

** Ca skin other than Melanoma

Table A2: Age specific Cancer Incidence per 100,000 population, Age standardized incidence and Cumulative risk, by site, age and sex, Peninsular Malaysia 2003

Site		Age groups, year															CR	ASR	CumR		
		0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-				75+	
LIP	Male										0.7	1.6	1.3	2.4	0.9	0.9	0.2	0.3	0		
LIP	Female							0.2	0.3		0.2	0.3	2.2	2.2	1.6	1.3	0.2	0.3	0		
TONGUE	Male					0.1	0.3	0.3	1.7	1.5	1.7	2.8	4.8	5.6	15.2	9.5	14.2	1.3	1.8	0.2	
TONGUE	Female					0.1	0.3	0.4	0.9	1.3	1.9	3.1	2	2.6	12.1	5.6	9.4	1	1.3	0.2	
SALIVARY GLANDS	Male	0.1	0.1		0.3	0.1	0.6	0.4		0.7	2.1	1.2	1.9	1.7	3.6	4.7	6.2	0.6	0.8	0.1	
SALIVARY GLANDS	Female		0.1	0.1	0.4	0.2	0.3	0.1	0.5	1.5	0.8	2.2	2	1.7	3.3	0.8	2.7	0.6	0.7	0.1	
GUM, MOUTH, OTHERS	Male		0.1	0.1		0.1	0.8	0.3	0.6	1.2	3	2.8	4.5	5.1	10.9	10.4	8	1.2	1.6	0.2	
GUM, MOUTH, OTHERS	Female			0.1	0.1		0.1	0.3	0.8	0.8	1.7	4.8	7.4	8.6	15.9	15.3	9.4	1.6	2.1	0.3	
OROPHARYNX	Male				0.1			0.1		0.7	0.6	1.9	3.8	3.4	7.3	6.6	5.3	0.6	0.9	0.1	
OROPHARYNX	Female					0.1	0.1		0.5	0.2	0.4	0.2	0.3	1.3	0.5	2.4	2.7	0.2	0.3	0	
NASOPHARYNX	Male	0.2		0.8	0.5	1.8	3.1	5.9	10.8	22.1	25.9	23.2	38.3	26.1	37.6	23.7	21.3	8.5	10.2	1.1	
NASOPHARYNX	Female	0.1		0.4	0.3	0.6	1.1	2.6	6.2	5.5	8.2	10.1	12.8	11.6	11	8.1	4.7	3.2	3.6	0.4	
HYPOPHARYNX	Male					0.2			0.2	0.2	0.4	0.5	0.6	3.4	4.2	6.6	4.4	0.4	0.6	0.1	
HYPOPHARYNX	Female								0.2	0.3	0.4	0.7	0.3	1.7		0.8	0.7	0.2	0.2	0	
OTHER PHARYNX	Male				0.1	0.1	0.1	0.1	0.5	0.5	0.9	1.4	2.9	2.1	6.1	4.7	2.7	0.5	0.8	0.1	
OTHER PHARYNX	Female		0.1	0.2			0.1		0.2	0.3	0.2	1.2	0.7	0.9	2.2	2.4	0.7	0.3	0.3	0	
ESOPHAGUS	Male					0.2		0.6	0.2	1.5	3.9	2.5	8	18.9	14	29.4	23.1	2	3.1	0.4	
ESOPHAGUS	Female				0.1				0.6	0.3	2.5	3.6	4.7	7.3	7.7	12.9	9.4	1.2	1.6	0.2	
STOMACH	Male		0.2		0.1	0.5	1	1.8	2.2	4.2	6.7	9.3	18.2	29.6	44.3	55	69.2	4.9	7.2	0.9	
STOMACH	Female		0.1	0.2	0.1	0.1	0.1	1.5	1.8	2.2	7.6	6.5	15.8	16.8	23.6	35.5	46.1	3.7	4.8	0.6	
SMALL INTESTINE	Male		0.2				0.4	0.6	0.3	0.5	1.1	1.4	2.6	2.6	3.6	5.7	4.4	0.6	0.8	0.1	
SMALL INTESTINE	Female					0.1	0.1	0.6	0.3	0.5	0.4	1.2	3	2.6	1.6	3.2	0.7	0.4	0.5	0.1	
Caecum	Male			0.1	0.1	0.1			0.2	0.7		0.7	1.9	2.6	0.6	6.6	5.3	0.4	0.5	0.1	
Caecum	Female				0.2		0.1	0.1			0.3	0.8	1.4	2.4	2.6	4.9	4.8	0.6	0.8	0.1	
Appendix	Male			0.1	0.2	0.1		0.3	0.2	0.3	0.2			0.4				0.1	0.1	0	
Appendix	Female				0.1	0.4		0.1			0.3	0.2		0.3	0.4	1.1		1.3	0.1	0.2	0
Ascending colon	Male											0.2	0.3	1.3	1.8	3.8	3.5	0.2	0.3	0	
Ascending colon	Female						0.1		0.3	0.2	0.2	0.2	0.3	0.9	1.6	0.8	1.3	0.2	0.2	0	
Hepatic flexure of colon	Male									0.2				0.9	0.6		2.7	0.1	0.1	0	
Hepatic flexure of colon	Female									0.2		0.5			1.1	1.6		0.1	0.1	0	
Transverse colon	Male						0.1	0.2				0.7	0.6	0.4	1.2	1.9	5.3	0.2	0.3	0	
Transverse colon	Female						0.1		0.5				1	0.4	2.2	0.8	0.7	0.1	0.2	0	

Site		Age groups, year														CR	ASR	CumR			
		0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-				70-	75+	
Splenic flexure of colon	Male									0.2					1.9	1.8	0.1	0.1	0		
Splenic flexure of colon	Female							0.2				0.7					0.7	0	0	0	
Descending colon	Male								0.2	0.2	0.2	0.3	0.4	0.6	3.8	1.8	0.1	0.2	0		
Descending colon	Female					0.1				0.3	1	0.2	0.9	1.6	0.8	3.3	0.2	0.3	0		
Sigmoid colon	Male			0.1		0.1	0.3	0.3	0.5	0.8	1.7	1.6	5.1	9.4	13.3	17.1	11.5	1.3	1.9	0.3	
Sigmoid colon	Female				0.1		0.1	0.1	0.8	0.7	1.1	3.8	4.7	6.9	9.9	8.9	15.4	1.2	1.6	0.2	
Other colon	Male		0.1	0.1	0.1	0.2	0.8	1.6	2.2	3.5	7.3	11.6	18.2	31.7	44.9	60.7	67.4	5.1	7.5	0.9	
Other colon	Female	0.1			0.1	0.6	0.8	1.8	2.6	4.4	7.6	15.6	20.5	24.9	31.8	54	42.1	5.1	6.6	0.8	
Rectosigmoid junction	Male						0.3	0.1		0.5	1.7	3.9	2.6	4.7	12.1	4.7	13.3	0.9	1.4	0.2	
Rectosigmoid junction	Female					0.1				1	1.7	1.9	3	3.4	6	6.4	6	0.7	1	0.1	
Rectum	Male				0.1	0.5	1.1	1.5	2.2	4	7.8	10.7	23.6	32.1	55.2	53.1	60.3	5.3	7.8	1	
Rectum	Female				0.1	0.4	0.3	1.9	3	4.2	5.3	9.6	14.8	28	29.6	36.3	46.8	4.3	5.7	0.7	
RECTUM	Male		0.1							0.2	0.2		0.6	0.9		2.8	2.7	0.1	0.2	0	
RECTUM	Female										0.2	0.2	1	1.3	1.1			0.1	0.1	0	
Anal canal	Male					0.2							0.6	0.4	0.6	3.8	3.5	0.1	0.2	0	
Anal canal	Female		0.1			0.1				0.2	0.2	0.5	0.3	0.9	1.6	1.6	4	0.2	0.3	0	
Anorectal /Anus	Male							0.1	0.2		0.2		0.6	0.9	1.2	0.9	1.8	0.1	0.2	0	
Anorectal /Anus	Female						0.1			0.2		1	0.7	2.2	0.5	1.6	2.7	0.2	0.3	0	
LIVER/ Intra-BILE DUCTS	Male	0.2	0.4	0.3	0.1	0.4	0.6	0.9	1.8	3.9	6.7	9.5	20.1	25.3	31.6	30.3	32.8	3.9	5.5	0.7	
LIVER/ Intra-BILE DUCTS	Female	0.3	0.1	0.3		0.4			0.6	0.3	1	2.5	3.1	7.1	9	16.5	11.3	12	1.6	2.1	0.3
GALLBLADDER/Extra-BILE DUCT	Male						0.1	0.6	0.5	0.7	0.6	2.8	5.1	4.7	7.3	6.6	7.1	0.8	1.2	0.1	
GALLBLADDER/Extra-BILE DUCT	Female						0.1	0.6	0.3	0.8	1.1	2.4	2	4.7	7.1	8.9	5.3	0.8	1.1	0.1	
PANCREAS	Male			0.2				0.1	0.3	0.7	1.1	3.9	6.1	7.3	8.5	11.4	16.9	1.2	1.7	0.2	
PANCREAS	Female		0.1	0.1	0.1	0.2	0.1	0.1	0.5	0.7	1.1	1.7	3	6	4.4	6.4	10	0.9	1.1	0.1	
OTHER DIGESTIVE ORGANS	Male	0.1		0.1		0.1			0.6		0.2	1.1	0.2	2.2	3.9	3.6	2.8	4.4	0.5	0.7	0.1
OTHER DIGESTIVE ORGANS	Female			0.2			0.1			0.2	0.2	1.1	1	3.4	1.7	1.1	3.2	4	0.4	0.5	0.1
NASAL, SINUSES, EAR	Male	0.2	0.1	0.1	0.2		0.3	0.3	1.1	1.5	1.1	1.9	3.8	4.7	4.9	8.5	10.6	1	1.3	0.1	
NASAL, SINUSES, EAR	Female				0.1		0.1	0.1	0.3	0.7	0.8	0.5	2.4	3	3.3	1.6	4	0.5	0.6	0.1	
LARYNX	Male	0.1		0.1		0.1	0.3		1.1	0.8	2.4	5.1	7	21.9	14	30.3	23.1	2.1	3.2	0.4	
LARYNX	Female	0.1							0.2	0.2	1	0.3	2.2	2.7	2.4	5.3	0.3	0.4	0		
TRACHEA, BRONCHUS AND LUNG	Male	0.1	0.1	0.7	0.4	0.7	1.8	0.9	3.2	6.9	15.3	26.6	56.1	93.4	149.9	181	150	13.4	20.3	2.6	
TRACHEA, BRONCHUS AND	Female			0.2	0.2		0.7	0.3	2	3.7	8	13	19.1	31.8	37.3	42.7	44.1	4.9	6.5	0.8	

Site		Age groups, year														CR	ASR	CumR				
		0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-				70-	75+		
CORPUS UTERI	Male																					
CORPUS UTERI	Female	0.1				0.2	0.8	1.2	4.2	8.9	15.6	19	29.9	29.2	30.2	18.5	20	5.5	6.9	0.8		
OVARY	Male																					
OVARY	Female	0.2	0.7	0.4	1.2	1.3	3.8	2.9	5.2	9.5	15.2	18.3	20.2	17.6	18.7	15.3	10	5.3	6.1	0.6		
FALLOPIAN, LIGAMENT, ADNEXA	Male																					
FALLOPIAN, LIGAMENT, ADNEXA	Female						0.1		0.5	0.3	0.2	0.7	1	0.4	0.5		0.7	0.2	0.2	0		
VAGINA	Male																					
VAGINA	Female								0.2	0.7	1	1.4	1.7	0.9	3.3	2.4	2.7	0.4	0.5	0.1		
VULVA	Male																					
VULVA	Female								0.2	0.3	0.2	0.5	1	0.9	2.7	1.6	2.7	0.2	0.3	0		
PROSTATE GLAND	Male	0.2	0.2	0.1	0.1	0.1		0.3	0.6	0.7	1.1	2.8	18.5	37.7	72.8	128	147.3	6.2	10.3	1.3		
PROSTATE GLAND	Female																					
TESTIS	Male	1	0.1	0.1	0.2	0.5	1.4	1.2	1.8	1	1.5	1.2	1.6	1.3	3.6	6.6	6.2	1	1.2	0.1		
TESTIS	Female																					
PENIS/ OTHER MALE GENITAL	Male				0.1	0.2		0.1	0.3	0.3	0.7		1.6	0.9	0.6	4.7	1.8	0.3	0.4	0		
PENIS/ OTHER MALE GENITAL	Female																					
URINARY BLADDER	Male	0.6			0.1		0.3	0.1	1.1	2.2	3.5	9.5	15.6	21.4	24.3	55	71	3.8	5.7	0.7		
URINARY BLADDER	Female	0.5		0.1			0.1		0.5	0.7	0.8	1.7	4.4	9.9	5.5	13.7	14	1.2	1.6	0.2		
KIDNEY	Male	1.8	0.5	0.1		0.2	0.1	0.7	1.5	1.8	1.7	6.5	6.7	16.3	12.7	18	9.8	2.1	2.8	0.3		
KIDNEY	Female	0.7	0.7	0.2	0.1	0.2	0.3	0.1	0.8	0.7	1.5	2.4	2.7	5.6	7.1	7.3	6	1.1	1.3	0.2		
OTHER URINARY	Male										0.2	0.5	0.6	0.9	0.6		0.9	0.1	0.1	0		
OTHER URINARY	Female			0.1							0.2		0.2		0.3	0.9	1.1	0.8	1.3	0.1	0.2	0
EYE/LACRIMAL GLAND	Male	1.5	0.1	0.4		0.4	0.4	0.1	0.2	0.2		0.2	0.3	0.4			0.9	0.4	0.4	0		
EYE/LACRIMAL GLAND	Female	1.7	0.1		0.2	0.1	0.1		0.3	0.2	0.2	0.2						0.3	0.3	0		
BRAIN	Male	1.1	1.6	2.4	1.3	1.4	2.4	3.3	2.5	3	1.5	3.2	3.5	5.6	9.1	11.4		2.3	2.6	0.3		
BRAIN	Female	1.2	1.9	1.7	1.3	1.7	1.5	2.1	2.7	1.8	2.1	2.9	6	2.6	5.5	4	2	2.1	2.2	0.2		
OTHER CNS	Male	0.1	0.2			0.5	0.1	0.1	0.6	0.3	0.9	0.2		0.4		0.9		0.2	0.2	0		
OTHER CNS	Female				0.2		0.1	0.1	0.5	0.5	0.2	0.5	1.3	0.9	2.2	0.8	0.7	0.3	0.3	0		
THYROID GLAND	Male	0.2	0.1		0.2	0.5	0.8	0.7	1.7	1.7	3.9	2.3	4.5	5.6	4.2	2.8	5.3	1.2	1.4	0.1		
THYROID GLAND	Female	0.1	0.1	0.6	0.7	1.6	2.9	5.4	4.4	6.7	5	8.2	11.4	7.7	11	15.3	10	3.4	3.8	0.4		
OTHER ENDOCRINE	Male	0.7	0.3	0.6	0.5	0.4		0.1	0.6	0.5	0.9	0.7	0.3	0.4	1.8	1.9		0.5	0.5	0		
OTHER ENDOCRINE	Female	0.9	0.6		0.1	0.2	0.1	0.6		0.3	0.4			0.4	0.5			0.3	0.3	0		
Hodgkin's disease	Male	0.1	0.5	0.6	1	0.9	1	0.4	0.8	0.7	1.3	1.2	1.3	1.3	1.2	0.9		0.7	0.8	0.1		

Site		Age groups, year															CR	ASR	CumR	
		0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-				75+
Hodgkin's disease	Female	0.1	0.1	0.1	0.7	0.5	0.3	0.6	0.5	0.3	0.4	0.5	0.7	0.9	2.2	0.8	2	0.4	0.5	0
Non-Hodgkin's lymphoma	Male	0.8	0.8	0.7	1.4	1.4	1.1	1.9	2.5	4.4	5.4	7.6	8.3	12	15.8	23.7	16	3.1	3.9	0.4
Non-Hodgkin's lymphoma	Female		0.5	1	0.3	1.3	1.1	0.9	1.4	2.2	3.8	4.1	6.4	5.6	12.1	12.9	6.7	1.9	2.3	0.3
Lymphatic leukaemia	Male	7.8	5.4	4	2.1	1.2	1.1	0.9	0.6	1.2	1.3	0.9	1.9	0.4	4.2	1.9		2.8	2.8	0.2
Lymphatic leukaemia	Female	4.3	4	2.9	0.5	0.5	0.6	0.1	0.9	0.7	0.8	1.4	1	0.4	1.6	1.6		1.7	1.7	0.1
Myeloid leukaemia	Male	3.3	2.7	1.8	1.9	1.8	2.1	3.6	3.2	3.5	3.5	2.3	3.5	6.4	10.3	6.6	5.3	3	3.2	0.3
Myeloid leukaemia	Female	1.8	2.4	2.1	1.7	1.7	2.6	2.8	2.4	2.5	4	4.3	3	5.2	7.7	5.6	5.3	2.7	2.8	0.2
Other leukaemia	Male	1.6	0.7	0.9	0.6	0.1	0.7	0.4	0.5	0.7	0.7	1.6	1.6	3.4	3.6	8.5	6.2	1.1	1.3	0.1
Other leukaemia	Female	0.6	0.5	0.5	0.5	0.5	0.1	0.1	0.3	0.5	0.6	2.2	1.3	1.7	3.3	4	2.7	0.7	0.8	0.1
Myeloma/Immunoproliferative	Male	0.4	0.1			0.1	0.3	0.6		0.3	0.6	1.6	5.1	3.9	3.6	9.5	0.9	0.7	0.9	0.1
Myeloma/Immunoproliferative	Female	0.2	0.1	0.1	0.1		0.3	0.6		0.3	0.2	1	2.4	4.7	3.8	2.4	1.3	0.5	0.7	0.1
HEMATOPOIETIC/ RE	Male	0.2						0.1		0.2				0.4			0.9	0.1	0.1	0
HEMATOPOIETIC/ RE	Female		0.1															0	0	0
UNKNOWN PRIMARY SITES	Male									0.2	0.2		0.3			0.9		0	0.1	0
UNKNOWN PRIMARY SITES	Female							0.1							0.5	0.8		0	0	0

Note:

** Ca skin other than Melanoma

Table A3: Age, sex and ethnic distribution of the population of Peninsular Malaysia 2003

Age group, years	Malay		Chinese		Indian		All groups	
	Male	Female	Male	Female	Male	Female	Male	Female
0-4	785,200	741,500	237,900	221,100	94,000	90,600	1,150,900	1,084,400
5-9	735,900	692,300	235,800	216,000	90,000	86,800	1,090,100	1,022,200
10-14	699,600	665,100	227,700	208,800	87,000	83,100	1,037,200	980,200
15-19	646,200	627,400	226,800	213,000	86,800	82,900	981,100	945,700
20-24	538,100	533,900	214,400	204,300	80,100	79,000	855,100	838,600
25-29	417,800	427,400	203,800	195,900	72,500	74,700	719,000	718,900
30-34	383,300	395,300	201,000	195,600	69,400	71,500	673,900	680,700
35-39	371,000	381,100	199,400	195,600	66,600	68,100	650,500	659,200
40-44	333,200	337,900	191,400	185,500	61,800	63,000	596,200	597,100
45-49	292,700	290,700	179,400	170,000	55,700	56,600	536,400	524,900
50-54	230,500	226,300	152,800	141,800	42,300	42,800	431,700	416,400
55-59	162,600	158,100	120,000	108,500	27,000	27,200	313,700	297,700
60-64	119,300	122,300	92,400	86,900	18,700	20,500	233,400	232,500
65-69	84,200	96,000	65,600	67,800	12,800	16,300	164,800	182,200
70-74	54,600	65,300	41,600	47,300	7,900	10,000	105,500	124,100
75+	62,900	78,400	39,300	59,900	8,600	9,600	112,700	149,700
TOTAL	5,917,100	5,838,800	2,629,400	2,517,800	881,300	882,500	9,652,200	9,454,600

Table A4: Age and sex distribution of the population of Sabah 2003

Age group, years	Male	Female
0-4	125,800	123,700
5-9	139,000	132,500
10-14	142,200	135,700
15-19	130,200	126,300
20-24	107,300	108,200
25-29	76,600	83,500
30-34	71,300	76,100
35-39	72,700	69,800
40-44	64,600	59,900
45-49	54,700	46,700
50-54	41,100	33,800
55-59	26,800	21,800
60-64	19,700	16,600
65-69	15,100	13,900
70-74	9,600	9,000
75+	10,100	9,500
TOTAL	1,106,800	1,069,000

** The figures in this table include the population of Labuan*

Table A5: Age and sex distribution of the population of Sarawak 2003

Age group, years	Male	Female
0-4	138,600	131,400
5-9	127,300	120,500
10-14	114,000	106,900
15-19	103,900	99,100
20-24	90,800	89,300
25-29	76,600	80,900
30-34	75,200	77,600
35-39	77,100	76,000
40-44	69,200	66,500
45-49	58,800	55,100
50-54	47,200	44,300
55-59	34,800	33,400
60-64	25,600	25,800
65-69	17,700	19,500
70-74	12,300	13,700
75+	15,800	17,000
TOTAL	1,085,000	1,057,000