20th Asia Pacific Cancer Conference

Tsukuba, Jepun

12 – 14 November 2009

Prof. Nor Hayati Othman
Dekan Penyelidikan Sains Klinikal &
Profesor Patologi
Pelantar Penyelidikan Klinikal

20th Asia Pacific Cancer Conference

20th Asia Pacific Cancer Conference

Cancer Control - Setting the Focus on Unique Asian Pacific Contributions

Date November 12[Thu.]-14[Sat.], 2009

Venue Tsukuba International Congress Center (Epochal Tsukuba)

President Hideyuki Akaza (Dept. of Urology, University of Tsukuba)

July 23, 2009

Dr. Nor Hayati Othman

Clinical Research Platform

Science University, Malaysia

Dear Dr. Nor Hayati Othman,

It is my great pleasure to inform you that the 20th Asia Pacific Cancer Conference will be held from November 12 to 14, 2009 at the Tsukuba International Congress Center (Epochal Tsukuba) in Tsukuba, Ibaraki, Japan.

The theme of this meeting is "Cancer Control - Setting the Focus on Unique Asian Pacific Contributions". As the conference is approaching, we would like to construct concrete recommendations by re-evaluating epidemiological characteristics of cancer in the Asia Pacific region, as well as carrying out comparative studies with data from the West, and the identified characteristics will serve as the basis for positive discussions in order to achieve proper preventions, diagnosis, and treatment of cancer.

For this purpose, we are organizing Consensus Working Groups (WG) on cancers that are prevalent in the Asia Pacific region. We are cordially inviting you as a member of WG of Cancer registry & Epidemiological study. Please refer to the enclosed General Information for more details of the WG. We kindly ask you to fill out the REPLY FORM and return it either by Fax or E-mail.

Once again, we thank you for your kind support and look forward to meeting you in Tsukuba in November, 2009.

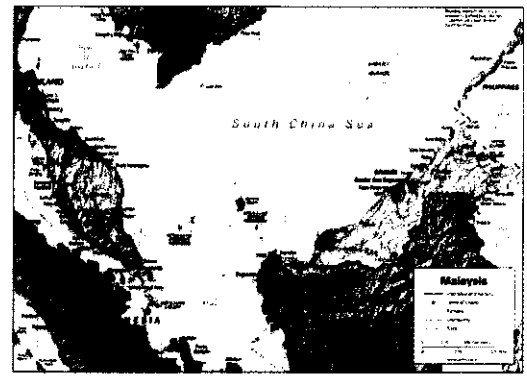
With best wishes and highest regards,

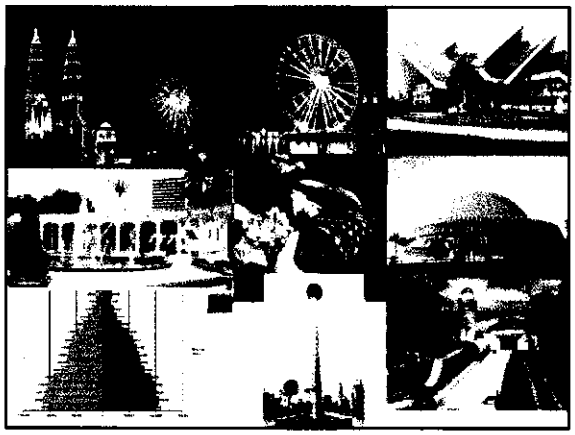
President, the 20th Asia Pacific Cancer Conference

Hideyuki Akaza
Department of Urology and Andrology, University of Tsukuba

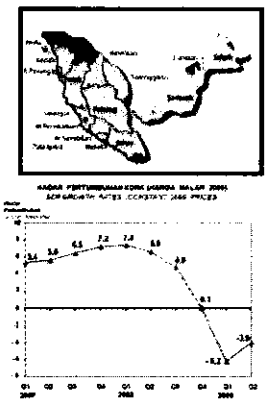
Country Report - Cancer Epidemiology In Malaysia

Nor Hayati Othman, Prof Dr
Dean, Clinical Science Research Universiti Sains Malaysia,
& Chairman Conjoint Board of Pathology, Malaysia





Malaysia



- 13 states;
  - 11 in the West Peninsular
  - 2 in the Borneo island
  - 3 Federal Territories
- 50.2% are Malays, 24.5% Chinese, 11.0% indigenous, 7.2% Indian, and the rest is made up by non-citizens and other minority groups
- It is a fast developing nation in South East Asia,
- Annual GDP of ~USD180,714 millions
- Aspire to be fully developed by 2020

Cancer registries in Malaysia

- Effort started in 1980
- Penang Cancer Registry [PCR] 1994
- Sarawak Cancer Registry [SCR] 1996
- National Cancer Registry [NCR] 200; 2003-5;2006
- National Cancer Patient Registry (NCPR)
  - colorectal carcinoma, - October 2007.
  - Hematological Malignancy,
  - Nasopharyngeal Cancer
  - Breast Cancer Registry-2008.
- Secretariat – Clinical Research Center [MOH]

NCR: 4 issues; 4 different names!

- 1st issue: The First Report Of The National Cancer Registry Cancer Incidence In Malaysia 200214
- 2nd Issue - The Second Report Of The National Cancer Registry Cancer Incidence In Malaysia 2003
- 3Rd issue - Cancer incidence in Peninsular Malaysia 2003-2005
- 4th Issue - Malaysia Cancer Statistics, Data and Figures, Peninsular Malaysia 2006

Cancer registries in Malaysia

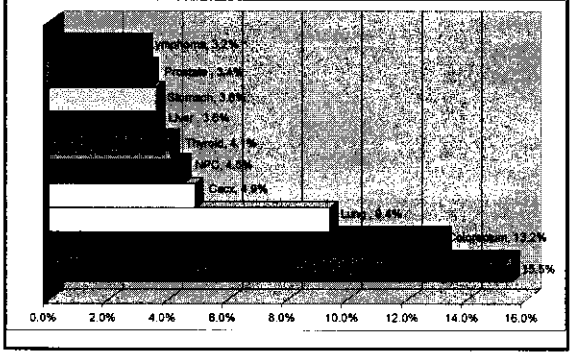
- Source Data providers (SDPs) –
  - pathology,
  - oncology,
  - haematology,
  - palliative care,
  - selected practices that manage specialized cancers such as breast, endocrine, Chest physicians, gastroenterologist, hepatobiliary surgeons, neurosurgeons and radiologists
- Ministry of Health hospitals,
- University Hospitals
- Private Hospitals
- Hospice centers.

The Resources of Health Care Services in Malaysia; 2006*

	Ministry of Health (MOH)	Universities and other government agencies	Private sector
No of hospitals	128	6	233
No of beds	30,969	2836	11637
No of special medical institutions	8	1	0
Health Clinics/general practice	807	6	10,000#
Rural Clinics [Klinik Desa]	1919	0	0
Total no of doctors	13,335 [including university hospitals]	[Count included under MOH]	8,602
Doctor: Population ratio	1:1,988	-	1:3,097
Maternal and Child Health Clinic	88	0	0
Mobile Clinics	151	0	0

*Health Facts 2006; Ministry of Health Malaysia;http://www.moh.gov.my, 2006

Top 10 cancers in Malaysia



The top 5 cancers in Peninsular Malaysia; 2002-2006.

	MALE			FEMALE		
rank 1	lung	Lung	CRC	breasts	Breasts	Breasts
rank 2	NPC	NPC	Lung	Cacx	Cacx	CRC
rank 3	CRC	CRC	NPC	CRC	CRC	Cacx
rank 4	leukemia	leukemia	Prostate	Ovary	Uterus	Ovary
rank 5	prostate	Prostate	Liver	Lung	Ovary	Thyroid

Ethnic differences

Year/cancer data	2003	2006
Total cancer	21464	21773
males	9400	9974
females	12064	11799
ASR* for all males	129.8	128.6
ASR* for all females	150.1	135.7
ASR* for both sexes	138.7	131.3
ASR* Chinese male	181.8	151.5
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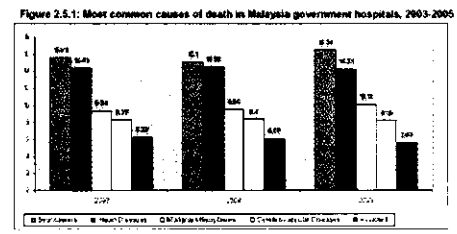
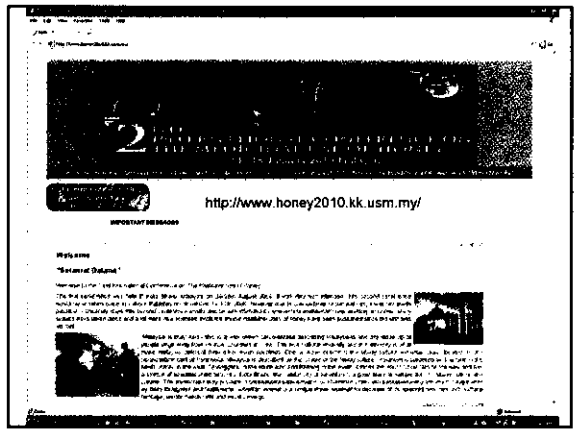
ASR* Indian female	188.3	134.7
ASR* Malay female	102.9	96.4
Participating centers providing data	275	220

ASR = ASR per 100,000 populations*



Challenges in getting quality epidemiology data

- We call our registry as 'National Cancer Registry' – in actual fact, it is only for West Malaysia
- The cancer data is collected manually and not all are histologically verified.
- Providing data to the secretariat is purely on voluntary basis
- There exists an unseen boundary between University and MOH hospitals, which are under two different ministries.
- The Registries we have has a 2-year lag, with the latest publication in 2006



COUNTRY REPORT - CANCER EPIDEMIOLOGY IN MALAYSIA

Nor Hayati Othman, Prof Dr
Dean, Clinical Science Research and Professor of Pathology,
Universiti Sains Malaysia,
Kubang Kerian, Kelantan, Malaysia
hayati@kb.usm.my

Introducing the country

Malaysia is a small country, comprises of two non-contiguous islands in South-East Asia with an acreage of 329,784 sq km and a population of 26.5 millions of which 49.1% are females. There are 13 states; 11 in the West Peninsular and 2 in the Borneo island and 3 Federal Territories [figure 1]. It is a fast developing nation in South East Asia, with an annual GDP of USD180,714 millions [ranked 36th], ahead of neighboring countries Singapore [ranked 43rd], Philippines [ranked 44th] and Vietnam [ranked 57th] and behind Thailand [ranked 33rd], Indonesia [ranked 20th] and India [ranked 12th] in the GDP listing by the World Bank in 2007[1]. The literacy rate of Malaysians is around 90%[2]. The population pyramid is as shown in Figure 2

Malaysia has a heterogeneous population of which 50.2% are Malays, 24.5% Chinese, 11.0% indigenous, 7.2% Indian, and the rest is made up by non-citizens and other minority groups. These ethnic proportions vary widely in different states. Some of these states are more urban than others. Population density ranges from 129 people/km^2 in West Malaysia and about 20 people/km^2 in East Malaysia[3]. In the Federal Territory of Kuala Lumpur it could be as high as 4521/km^2 living on high rise buildings[4]. From historic and socio-economic prospective, these various ethnic groups post diverse problems in terms of health care implementation, perception of health and disease and reception to health services. Chinese people in general had been shown to have the highest risk for all cancers, followed by Indians and Malays[5,6]. The Malays often come with larger breast cancer size at presentation than other races[7]. Ethnic differences are also seen in adjacent neighbouring countries; Singapore,[8, 9] and Brunei Darusalam[10]. Cancer registries in Malaysia give emphasis on differences in cancer incidence among these ethnic groups.

Cancer registry in Malaysia

The efforts to establish a cancer registry in Malaysia started in 1980, where Institute for Medical Research (IMR) in Kuala Lumpur was authorized to develop an official registry that would combine the resources of the various university faculties, the hospitals, research institutes, and cancer society[11]. Regional cancer registries were established in Penang in 1994[12] and Sarawak in 1996[13] much earlier than the National Cancer Registry (NCR) which only materialized in 2002[14]. The NCR receives data on cancer from Source Data providers (SDPs) who were from the following disciplines: pathology, oncology, haematology, palliative care, and selected practices that manage specialized cancers such as breast, endocrine, Chest physicians, gastroenterologist, hepatobiliary surgeons, neurosurgeons and radiologists working in Ministry of Health hospitals, University and private Hospitals, and from hospice centers. Its secretariat is at Clinical Research Center (CRC), Ministry of Health Malaysia. Up to now Ministry of Health Malaysia has issued 4 registries; for year 2002[14], 2003[5], combined 2003-2005[15] issue and for 2006. The participating centers also increased from 114 in the first issue[14], 275 in the 2nd issue[5], 190 in the 3rd and 220 in the 4th issue[16]. Although the format of these data in all issues remains essentially similar, the names of these registries however are not consistent. The names for the Registries are;

1. 1st issue: The First Report Of The National Cancer Registry Cancer Incidence In Malaysia 2002[14]
2. 2nd Issue - The Second Report Of The National Cancer Registry Cancer Incidence In Malaysia 2003[5]
3. 3Rd issue - Cancer incidence in Peninsular Malaysia 2003-2005[15]
4. 4th Issue - Malaysia Cancer Statistics, Data and Figures Peninsular Malaysia 2006[16]

Other registries also recently materialized organized by the CRC, such as The National Cancer Patient Registry(NCPR) as a database for cancer patients who seek treatment in Malaysia[17]. The earliest NPCR is for colorectal carcinoma, established in October 2007[18]. Others include Hematological Malignancy, Nasopharyngeal Cancer and Breast Cancer Registry[19]. These specific cancer registries are at early phase of development.

Cancer Data

A total of 21,773 cancer cases were diagnosed among Malaysians in Peninsular Malaysia in the year 2006[16]. It comprises of 9,974 males and 11,799 females. The Age standardized Incidence Rate (ASR) for all cancers in the year 2006 regardless of sex was 131.3 per 100,000. The top 10 cancers are in Figure 3. The five most common cancer among population of Peninsular Malaysia for 2006 were breast (ASR 39.3 per 100,000 populations) , colorectal (ASR 18.4 per 1100,000 populations), lung (ASR 13.3 per 100,000 populations), cervix (ASR 12.2 per 100,000 populations) and nasopharynx (ASR 8.5 per 100,000

populations). There is a gradual shift in the rank of colorectal carcinoma among the top 5 cancers (Table 1). Cancer was the third leading cause of death among medically certified deaths in 2003-2005 (Figure 4)[15]. Cancer of the lung is the most common killer among malignancies[20].

Cancer seems to be predominant among Chinese as compared to Malay and Indian in all the four registries (Table 2). When stratified by age groups, the most common cancer in males of 0-14 years of age is hematological malignancies (38.8%), Nasopharyngeal carcinoma in 15-49 years (12.8%), colorectal carcinoma in 50-69 years (18.2%) which is also seen as the most common cancer among >70 years of age (18.9%)[16]. The incidence of colorectal cancer in Peninsular Malaysia increased with age with the overall ASR was 18.4 per 100,000 population. The incidence was slightly higher among males (ASR 21.6 per 100,000) compared to females (ASR 15.4 per 100,000 population). The incidence was highest among Chinese where the ASR was 21.4 per 100,000 population[16].

Challenges in getting quality epidemiology data

Malaysia has only started cancer registry for the last 7 years, our data is not yet 'mature'. Although the total number of cancer incidence in Malaysia is increased in 2006 compared to 2003, the ASR by ethnic group and gender decreased in 2006 possibly due to contamination with prevalent data for 2003 (Table 2). We call our registry as 'National Cancer Registry' – in actual fact, it is only for West Malaysia. So far to have combined data from West and East Malaysia is not possible due to logistic reason. The cancer data is collected manually and not all are histologically verified. Providing data to the secretariat is purely on voluntary basis. There exists an unseen boundary between University and MOH hospitals, which are under two different ministries. Even among university hospitals there is no commonality in collecting and depositing data. More private hospitals could be recruited as SDPs. The Registries we have has a 2-year lag, with the latest publication in 2006. Despite these constraints, Malaysia is showing improvement in data collection and analysis and is on the right tract in getting quality data.

Figure 1: Map of Malaysia Map of Malaysia indicating the different states and Federal Territories

Key: shaded green Malaysia; shaded brown neighboring countries.

Figure 2: Population pyramid in Malaysia; 2006

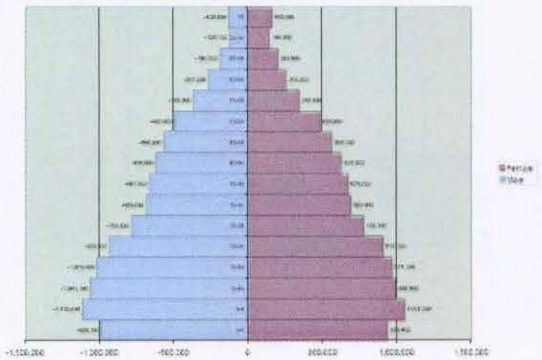


Figure 3: The top 10 cancers of Peninsular Malaysia in 2006

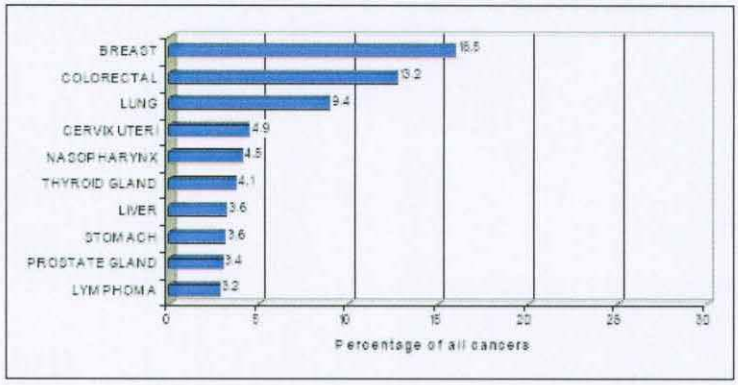


Table 1: The top 5 cancers in Peninsular Malaysia; 2002-2006.

	MALE			FEMALE		
	2002	2003	2006	2002	2003	2006
rank 1	lung	Lung	Colorectum	breasts	Breasts	Breasts
rank 2	NPC	NPC	Lung	Cacx	Cacx	Colorectum
rank 3	Colorectum	Colorectum	NPC	Colorectal	Colorectum	Cacx
rank 4	leukemia	leukemia	Prostate	Ovary	Uterus	Ovary
rank 5	prostate	Prostate	Liver	Lung	Ovary	Thyroid

Figure 4: Top 5 cause of death in Peninsular Malaysia; 2003-2005

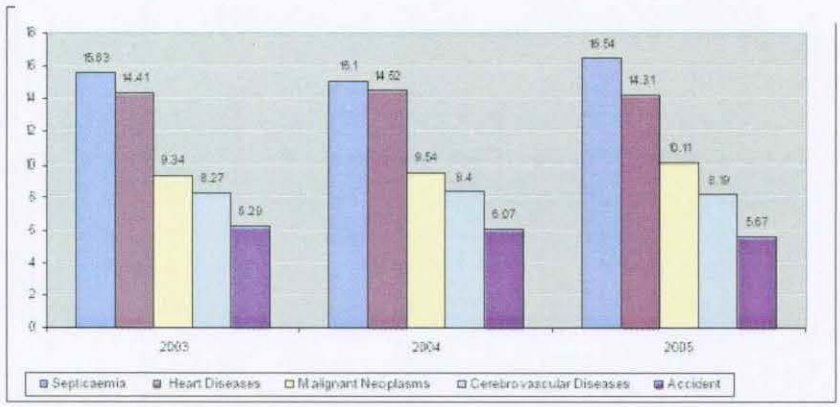


Table 2: Cancer data for Peninsular Malaysia; 2002, 2003 and 2006

Year/cancer data	**2003**	**2006**
Total cancer	21464	21773
males	9400	9974
females	12064	11799
ASR* for all males	129.8	128.6
ASR* for all females	150.1	135.7
ASR* for both sexes	138.7	131.3
ASR* Chinese male	181.8	151.5
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Participating centers providing data	275	220

ASR* = ASR per 100,000 populations

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Poster 0077

Abstract

Expressions of p16INK4a, p27kip1 and p21WAF1 in differentiating primary adenocarcinoma of endometrium from adenocarcinoma of endocervix

Farveen Marican Abu Backer*, Nik Raihan Nik Mustapha**, Nor Hayati Othman*
Pathology department, *Hospital Universiti Sains Malaysia [HUSM] Kelantan, **Hospital Sultanah Bahiyah [HSB] Alor Star.

The distinction between an endocervical adenocarcinoma (ECA) and an endometrial adenocarcinoma (EMA) can be problematic on small biopsies or when there is tumor in both endocervical and endometrial specimens or when the tumor has extended into the lower uterine segment. The judgment is difficult to be based on histomorphology alone because these tumors can have similar histologic appearance.

We investigated the value of p16INK4a, p21WAF1 and p27kip1 immunohistochemistry for distinguishing ECA and an EMA. We immunostained tissue sections of archival samples from 2005 to 2008 from HUSM and HSB. The immunochemical staining scores were correlated with their clinicopathologic parameters.

There were 40 ECA and 92 EMA cases examined. We observed significant higher expressions of p16INK4a and p27kip1 ([p <0.001] (80% versus 25%) and [p=0.001] (43% versus 15%)) in ECA than in EMA. ECA could be differentiated from EMA based on the combination expressions of p16INK4a and p 27kip1. p21WAF1 expression did not differentiate these two carcinomas (70% versus 78%, p=0.312). There was significant association seen between negative p16INK4a expression and low histologic grade in EMA (p=0.014). In ECA, p21WAF1 expression shows significant association with corpus infiltration (p=0.043) while negative p27kip1 expression with lymph node invasion (p=0.030). Multivariate analysis however shows no association between lymph node invasion and p27kip1 expression adjusted by race, histologic grade, vascular invasion, p21WAF1 expression and extension into the uterine corpus.

In conclusions, combination of p16INK4a and p27kip1 expression is helpful in differentiating ECA from EMA. In small biopsy, the expression of p21WAF1 may help in assessing the presence of corpus infiltration in ECA cases. P27kip1 expression is helpful in predicting presence of lymph node invasion also in ECA cases.

Poster 0076

Challenges to cervical screening in a developing country: The case of Malaysia

[1]Nor Hayati Othman,[2]Matejka Rebolj [1]Department of Pathology, University Sains Malaysia, Kubang Kerian, Kelantan, Malaysia, , [2]Centre for Epidemiology and Screening, Institute of Public Health, University of Copenhagen, Copenhagen, Denmark

Abstract

Objectives: Many developing countries including Malaysia will need to continue relying on cervical screening because they will not be able to cover their entire female adolescent populations with HPV vaccination. The aim of this paper was to establish the extent of the health care, informational, financial and psychosocial barriers to cervical screening in Malaysia.

Methods: Literature search for reports on implementation, perceptions and reception of cervical screening in Malaysia published between January 2000 and September 2008.

Results: Despite offering Pap smears for free since 1995, only 26% of Malaysian women have been screened. Several factors may have contributed to this. No call-recall system has been established. Women are informed about cervical screening primarily through mass media rather than being individually invited. Smears are free of charge if taken in public hospitals and clinics, but the waiting times are often long. The health care system is unequally dense, with rural states being underserved compared to the urban ones. If the screening coverage was to increase, the shortage of smear-readers would become increasingly apparent.

Conclusions: Improving screening coverage will remain an important strategy of combating cervical cancer in Malaysia. The focus should be on the policy-making context, improving awareness and the screening infrastructure, and making the service better accessible to women.

20th Asia Pacific Cancer Conference

WG Meeting Thu, Nov. 12
Cancer registry and Epidemiological study
start at 14:00

Cancer Registry

1. Sobue T (Japan) opening remarks 3min

(from No.2 to 17, each speakers have 5+5 min with maximum 6 slides. The title is "Current situation of population-based cancer registry in my country and/or what cooperation is feasible to improve data quality and promote data usage in this region)

(2~5 will be chaired by Lumague R (Philippine) and Park S (Korea))

2. Eser S (Turkey) 14:03
3. Mosavi-Jarrahi A (Iran)
4. Bener A (Qatar)
5. Bhurgri Y (Pakistan)

(6~9 will be Chaired by Noorwati S (Indonesia) and Chen SW (China))

6. Foliaki S (NZ) 14:43
7. Roder D (Australia)
8. Mathew A (India)
9. Sinuraya ES (Indonesia)

(10~13 will be chaired by Tsukuma H and Lai MS (Taiwan))

10. **Othman NH (Malaysia)** 15:23
11. Lumague R (Philippines)
12. Promthet S (Thailand)
13. Ngoan LT (Viet Nam)

* * * Break for 20min * * *

(14~17 will be chaired by Nagata C and Mathew A (India))

14. Chen SW (China) 16:23
15. Park S (Korea)
16. Lai MS (Taiwan)
17. Tanaka H (Japan)

18. Discussion for "better cooperation of cancer registry in Asia-Pacific region", chaired by Sobue T and Tanaka H. 20min 17:03

Epidemiological Study

19. Inoue M (Japan) remarks for epidemiology session 3min 17:23

(20~23 will be chaired by Mizoue T and Qiao Y-L (China))

20. Kang D (Korea) 17:26
    International collaboration using a cohort data: Asia Cohort Consortium.
21. Matsuo K (Japan)
    Genome wide association study involved in Asia.

(from No.20 to 21, each speakers have 10+5 min with maximum 12 slides)

22. Discussion 15min (will be chaired by Inoue M and Kang D) 17:56
23. Closing remarks by Tajima K (Japan) 2min

end at 18:13 (for 253 min including 20 min break)

WG Meeting Sat, Nov. 14

start at 15:40

Chaired by Sobue T, Tanaka H and Inoue M

1. Shin HR (IACR) 10+5min
   A role of IACR for cooperation of cancer statistics in this region.
2. Wiangnon Surapon (IACR) 10+5min
   Strategy in IACR for cooperation of cancer registry in this region.
3. Inoue M (Japan) 10+5min
   Promotor and inhibitor in epidemiological collaborative study for cancer prevention in Asia-Pacific region.
4. Discussion 15min

5. Sobue T (Japan) 8min 16:40
   Conclusion of the WG
6. Tajima K (Japan) 2min
   Closing remarks

end at 16:50 (for 70min)

(Closing ceremony will start at 17:00)