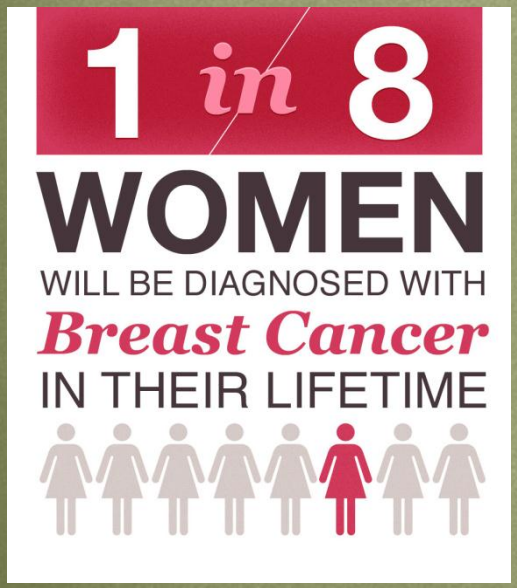

بسم الله الرحمن الرحیم
غلامحسین امیرخانی
۱۳۶۲

برنامه ثبت سرطان مبتنی بر جمعیت
استان آذربایجان شرقی

East Azerbaijan Population Base Cancer Registry Preliminary Report

October is: Breast Cancer Awareness Month



The best protection is early detection

International Agency for Research on Cancer

World Health Organization

GLOBOCAN 2012: Estimated Cancer Incidence, Mortality and Prevalence Worldwide in 2012

All Cancers (excluding non-melanoma skin cancer)

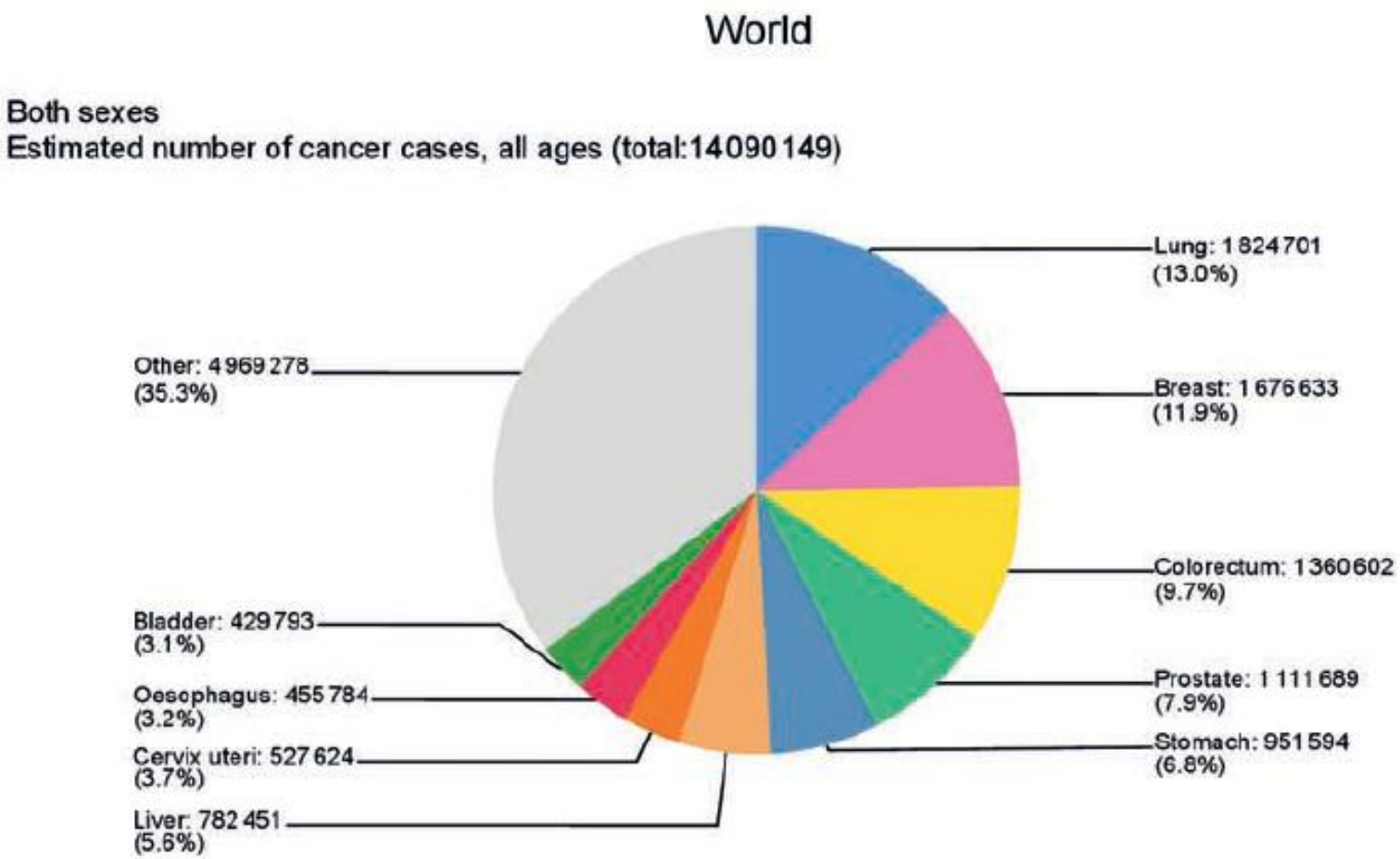
Estimated Incidence, Mortality and Prevalence Worldwide in 2012

Estimated numbers (thousands)	Men			Women			Both sexes		
	Cases	Deaths	5-year prev.	Cases	Deaths	5-year prev.	Cases	Deaths	5-year prev.
World	7410	4653	15296	6658	3548	17159	14068	8202	32455
More developed regions	3227	1592	8550	2827	1287	8274	6054	2878	16823
Less developed regions	4184	3062	6747	3831	2261	8885	8014	5323	15632
WHO Africa region (AFRO)	265	205	468	381	250	895	645	456	1363
WHO Americas region (PAHO)	1454	677	3843	1429	618	4115	2882	1295	7958
WHO East Mediterranean region (EMRO)	263	191	461	293	176	733	555	367	1194
WHO Europe region (EURO)	1970	1081	4791	1744	852	4910	3715	1933	9701
WHO South-East Asia region (SEARO)	816	616	1237	908	555	2041	1724	1171	3278
WHO Western Pacific region (WPRO)	2642	1882	4493	1902	1096	4464	4543	2978	8956
IARC membership (24 countries)	3689	1900	9193	3349	1570	9402	7038	3470	18595
United States of America	825	324	2402	779	293	2373	1604	617	4775
China	1823	1429	2496	1243	776	2549	3065	2206	5045
India	477	357	665	537	326	1126	1015	683	1790
European Union (EU-28)	1430	716	3693	1206	561	3464	2635	1276	7157

At a glance

There were 14.1 million new cancer cases, 8.2 million cancer deaths and 32.6 million people living with cancer (within 5 years of diagnosis) in 2012 worldwide. 57% (8 million) of new cancer cases, 65% (5.3 million) of the cancer deaths and 48% (15.6 million) of the 5-year prevalent cancer cases occurred in the less developed

Estimated world cancer incidence proportions by major sites, in both sexes combined, in men, and in women, 2012.

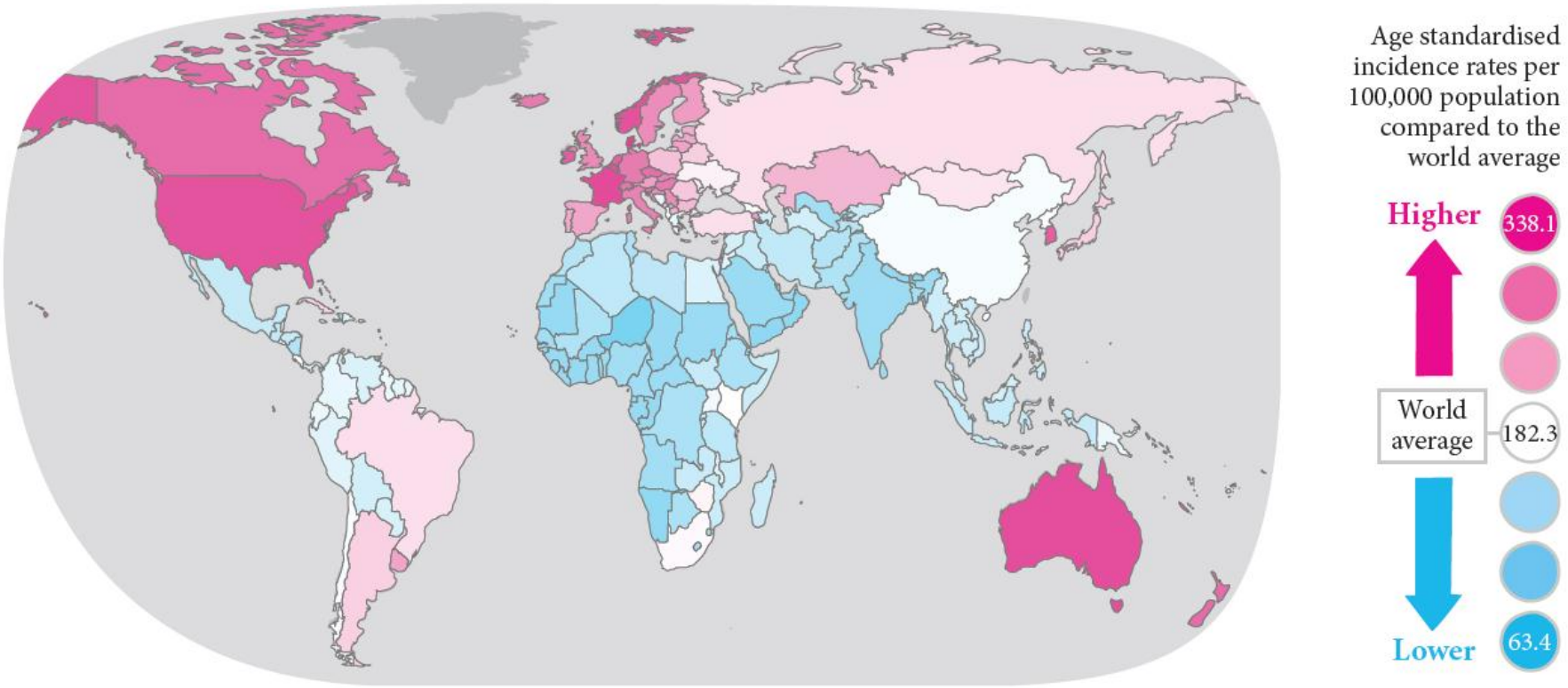


International Agency for Research on Cancer

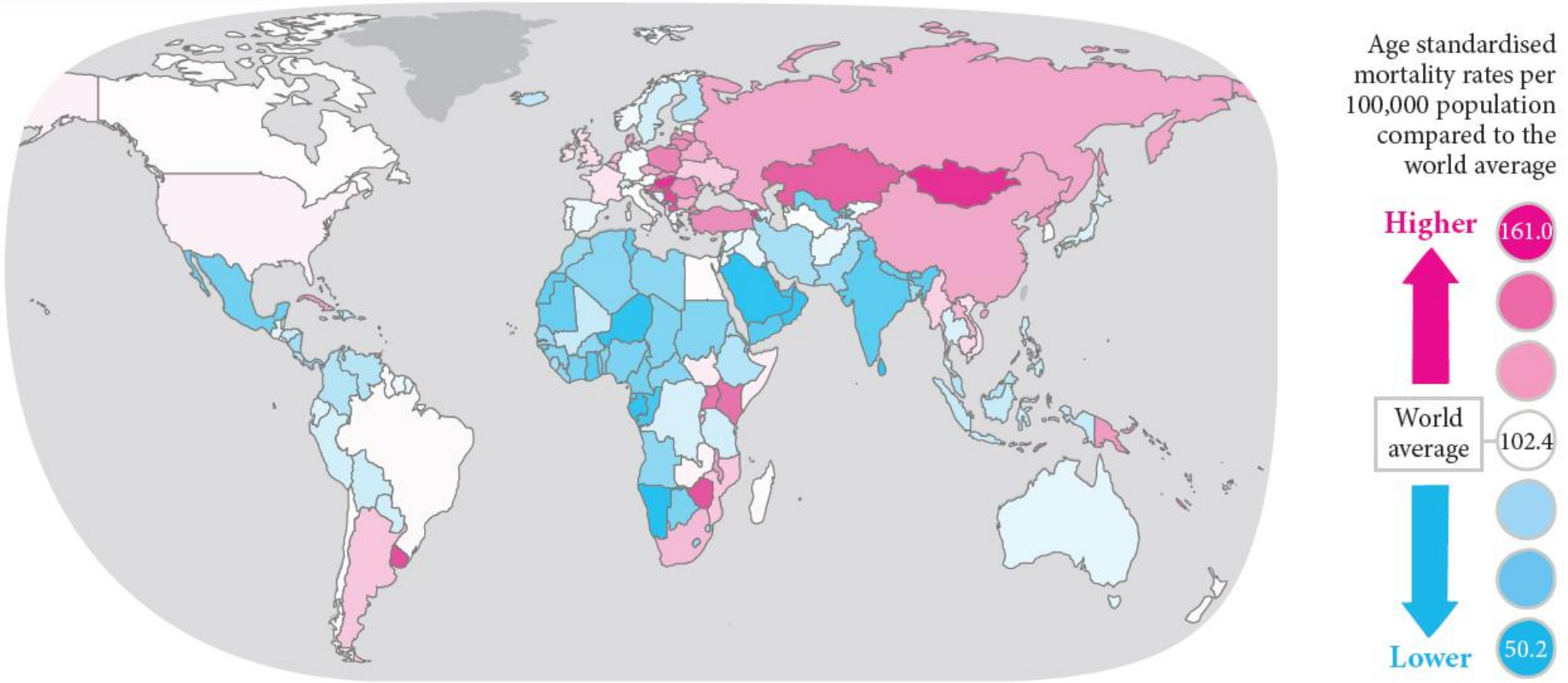
World Health Organization

CANCER RESEARCH UK

Incidence 2012 // Cancer incidence by country



Mortality 2012 // Cancer mortality by country



Cancer Incidence and Mortality in Iran (Source GLOBOCAN 2012)

Estimated incidence, mortality and 5-year prevalence: both sexes

Cancer	Incidence			Mortality			5-year prevalence		
	Number	(%)	ASR (W)	Number	(%)	ASR (W)	Number	(%)	Prop.
Lip, oral cavity	1380	1.6	2.0	449	0.8	0.7	3024	1.8	5.2
Nasopharynx	418	0.5	0.6	214	0.4	0.3	1153	0.7	2.0
Other pharynx	217	0.3	0.3	152	0.3	0.2	500	0.3	0.9
Oesophagus	5343	6.3	8.6	4915	9.2	7.8	4811	2.8	8.2
Stomach	9660	11.4	15.3	8247	15.5	12.9	12070	7.1	20.6
Colorectum	7163	8.4	11.1	4262	8.0	6.6	15429	9.1	26.4
Liver	1567	1.8	2.5	1492	2.8	2.3	888	0.5	1.5
Gallbladder	753	0.9	1.2	707	1.3	1.1	838	0.5	1.4
Pancreas	1138	1.3	1.8	1096	2.1	1.8	775	0.5	1.3
Larynx	1381	1.6	2.2	550	1.0	0.9	3585	2.1	6.1
Lung	4888	5.8	7.7	4361	8.2	6.8	4015	2.4	6.9
Melanoma of skin	531	0.6	0.8	208	0.4	0.3	1250	0.7	2.1
Kaposi sarcoma	93	0.1	0.1	44	0.1	0.1	199	0.1	0.3
Breast	9795	11.5	28.1	3304	6.2	9.9	34165	20.1	118.1
Cervix uteri	947	1.1	2.8	370	0.7	1.2	2647	1.6	9.1
Corpus uteri	795	0.9	2.5	196	0.4	0.6	2929	1.7	10.1
Ovary	1637	1.9	4.8	1076	2.0	3.4	4074	2.4	14.1
Prostate	4111	4.8	12.6	2297	4.3	6.2	10292	6.1	34.8
Testis	721	0.8	1.7	269	0.5	0.7	2254	1.3	7.6
Kidney	1641	1.9	2.5	1071	2.0	1.7	3440	2.0	5.9
Bladder	5343	6.3	8.4	2280	4.3	3.5	13589	8.0	23.2
Brain, nervous system	3057	3.6	4.3	1844	3.5	2.7	4917	2.9	8.4
Thyroid	2025	2.4	2.7	610	1.1	1.0	7657	4.5	13.1
Hodgkin lymphoma	1057	1.2	1.3	491	0.9	0.7	3085	1.8	5.3
Non-Hodgkin lymphoma	3257	3.8	4.7	1987	3.7	3.0	5130	3.0	8.8
Multiple myeloma	984	1.2	1.6	766	1.4	1.3	1527	0.9	2.6
Leukaemia	3926	4.6	5.8	3064	5.7	4.6	3888	2.3	6.7
All cancers excl. non-melanoma skin cancer	84829	100.0	127.7	53350	100.0	81.9	169715	100.0	290.1

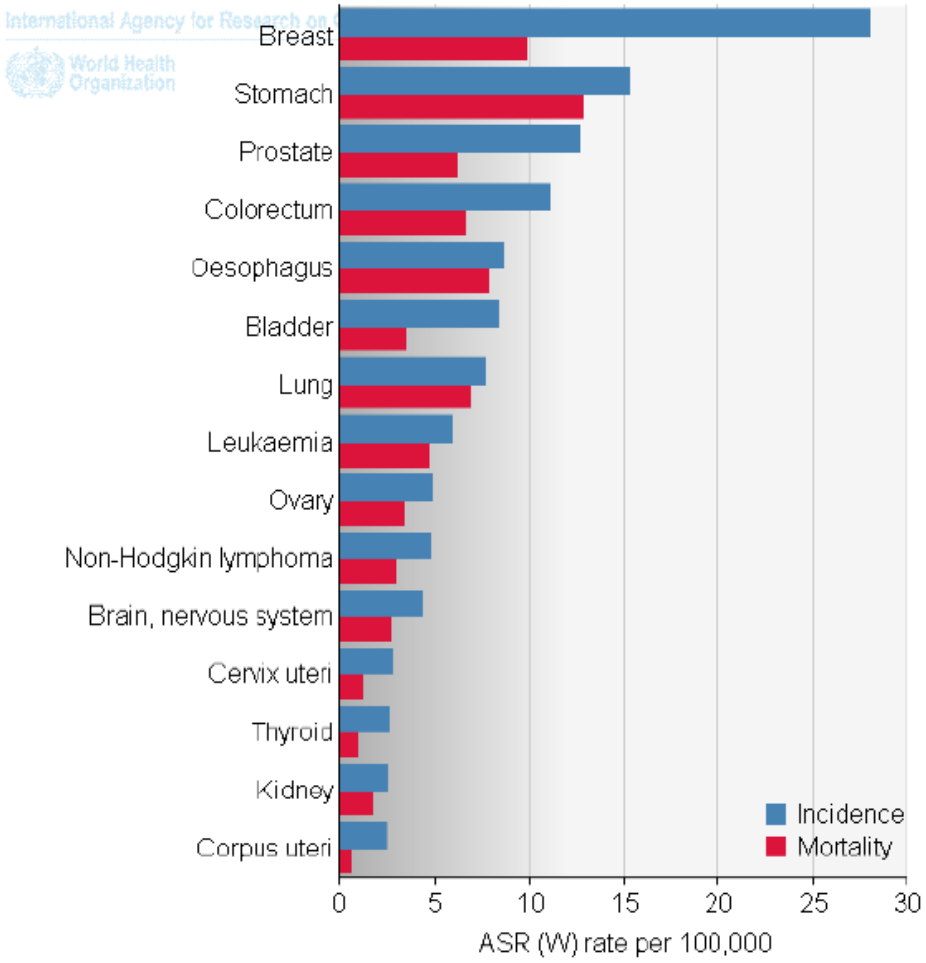
Incidence and mortality data for all ages. 5-year prevalence for adult population only.
ASR (W) and proportions per 100,000.

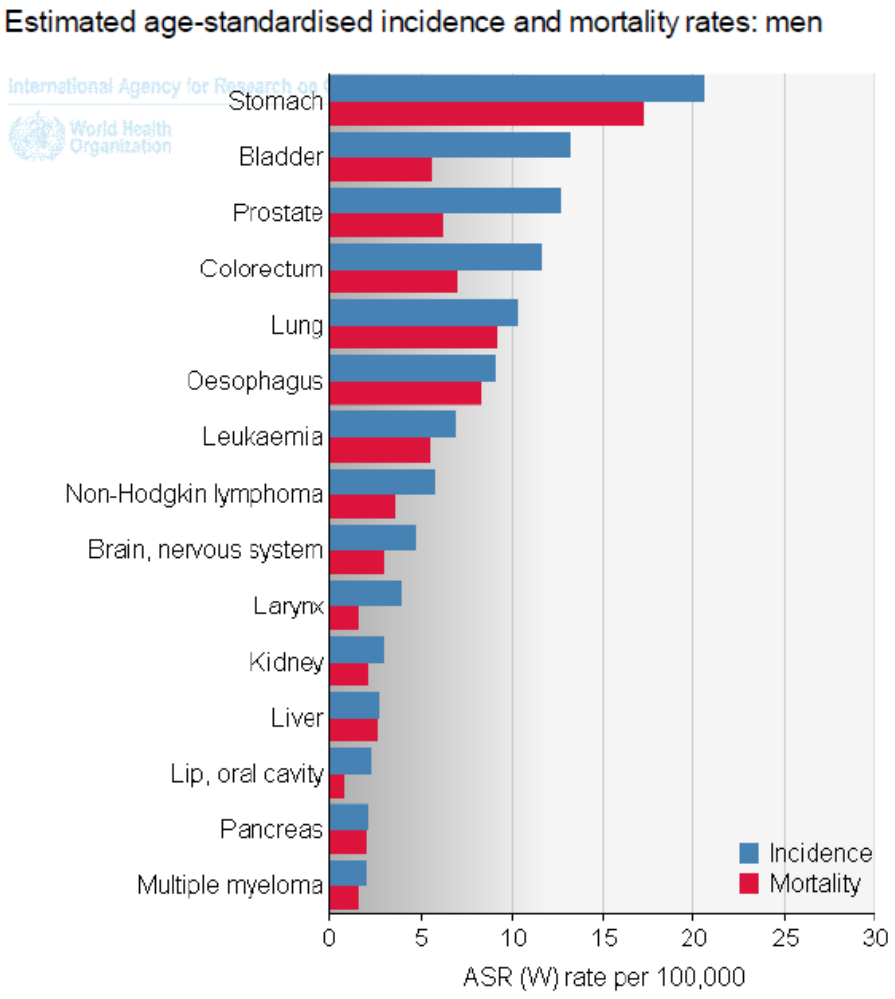
International Agency for Research on Cancer

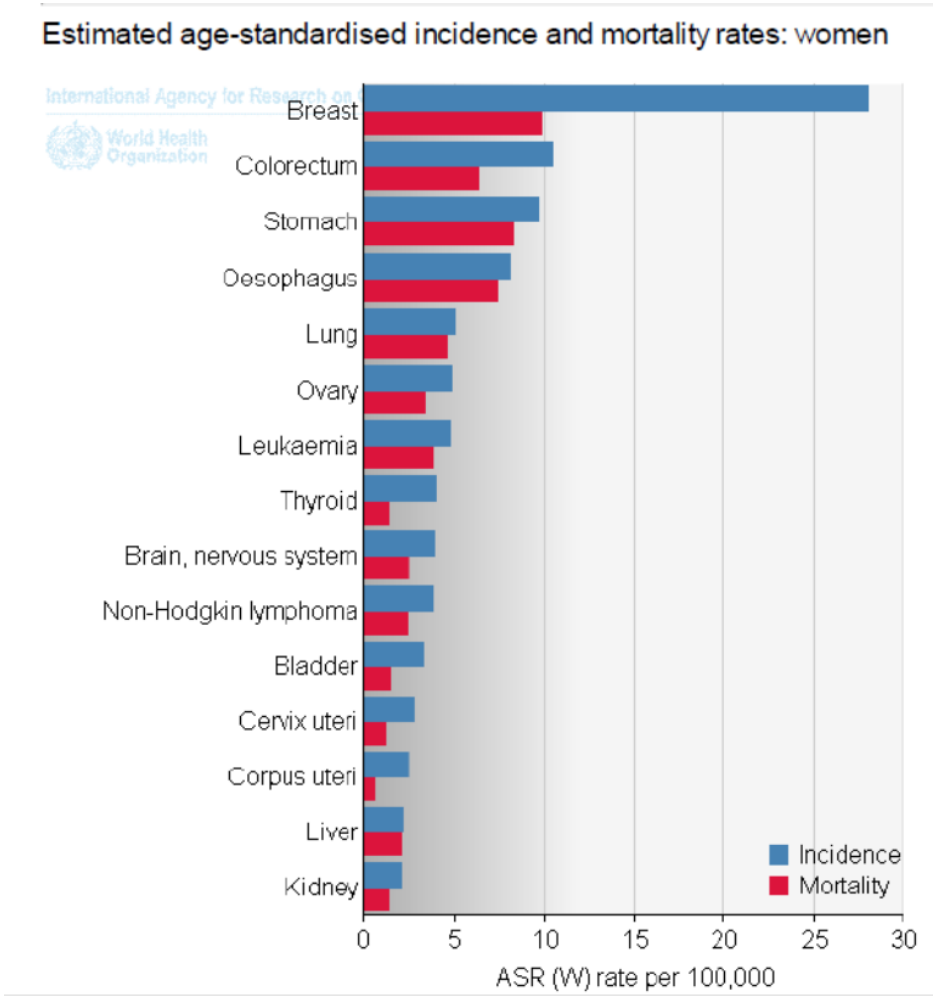
Men
Women
Both sexes
Summary statistics

ISLAMIC REPUBLIC OF IRAN

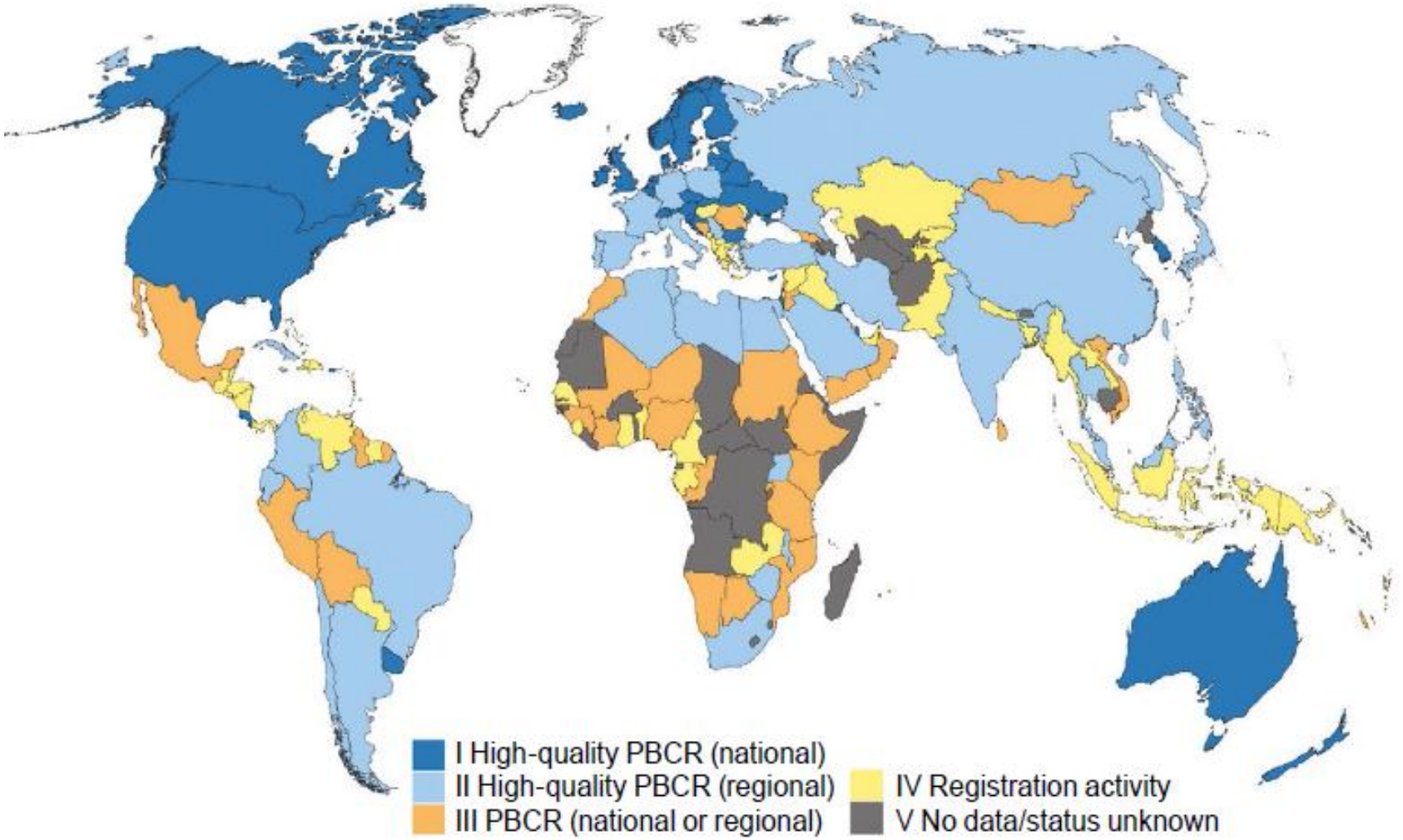
Estimated age-standardised incidence and mortality rates: both sexes




Estimated age-standardised incidence and mortality rates: men
International Agency for Research on Cancer
World Health Organization
Stomach
Bladder
Prostate
Colorectum
Lung
Oesophagus
Leukaemia
Non-Hodgkin lymphoma
Brain, nervous system
Larynx
Kidney
Liver
Lip, oral cavity
Pancreas
Multiple myeloma
Incidence
Mortality
0
5
10
15
20
25
30
ASR (W) rate per 100,000


Estimated age-standardised incidence and mortality rates: women
International Agency for Research on Cancer
World Health Organization
Breast
Colorectum
Stomach
Oesophagus
Lung
Ovary
Leukaemia
Thyroid
Brain, nervous system
Non-Hodgkin lymphoma
Bladder
Cervix uteri
Corpus uteri
Liver
Kidney
Incidence
Mortality
0
5
10
15
20
25
30
ASR (W) rate per 100,000

What is the status of population-based cancer registration worldwide?



History of Cancer Registry in Iran

REPORT OF A VISIT TO IRAN
2-7 March 2003

D.M. Parkin

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CANCER REGISTRATION IN IRAN

National Cancer Registry

The National Registry is the responsibility of the Disease Central Department of the Ministry of Health and Medical Education (Director: Dr M.M. Gooya). The current registry director is Dr A. Samavat.

The registry has undergone several modifications in strategy over the years. The obligation to notify cancer registry of new cancer cases has been a legal requirement since 1994. But reporting to the MOH registry was far from complete. In the last few years, the strategy has been to develop a system of national pathology registration, aiming, given the departments' limited budget, to automate the process as far as possible.

Pathology departments throughout the country are being supplied with a specially designed software (Pathology Accession and Reporting System, PARS). This allows pathology departments to create their own database, based on specimens examined.

Cancer Research Center
Cancer Institute of I.R. Iran

National Program (Pathology based Cancer Registry)

◦1994: law for the compulsory reporting of cancer cases
◦1996: a program was established for the cancer registration of cancer from pathology departments in Iran (18,435)

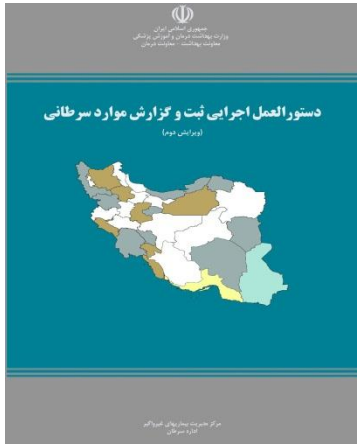
◦1999: second report with about 11,000 cancer cases(only 18%)

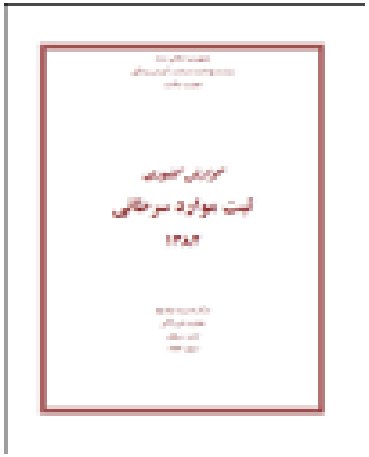
◦2000: Extension to provincial level: 18000 cases

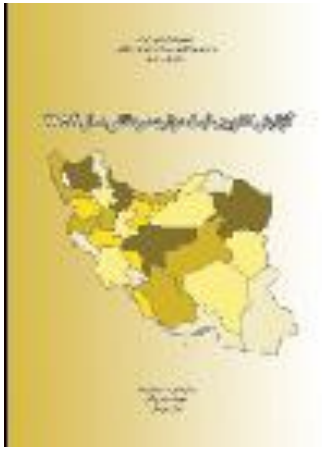
2007: population based cancer registry in 5 province(Tehran, Fars, Kerman, Ardabil, Golestan)
-62040 new cases (81%)
◦Annual reports in 2008:

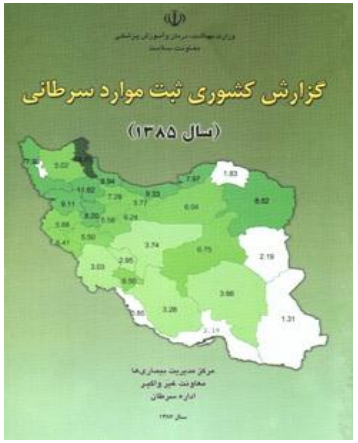
- 76159 new cases, M: 42,279, F: 33,880

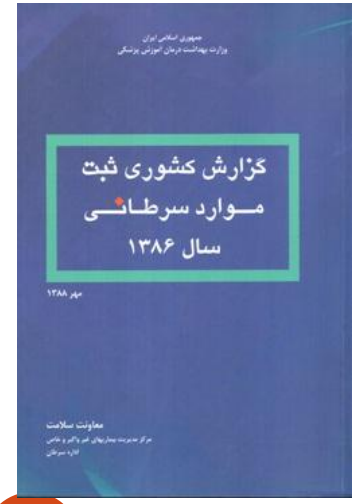
Publications

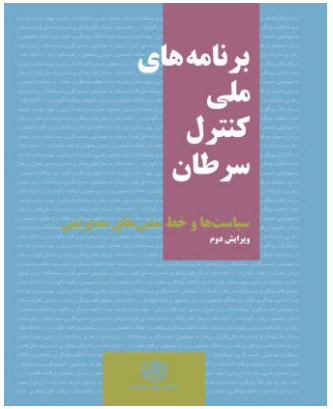












National Program for PBCR in Iran (60% of the population)

1-Ardebil
2-Kerman
3-Fars
4-Kermanshah
5-East Azerbaijan
6-West Azerbaijan
7-Khouzestan
8-Mazandaran
9-Hormozegan
10-Golestan
11-Yazd
12-Khorasan Razavi
13-Guilan
14-Tehran

IACR
International Association of Cancer Registries

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Home > Membership > Login Membership > Iran National Cancer Registry

Iran National Cancer Registry Profile Page

Region: Asia

Membership: Associate

Contact Info | Description | Photos | Presentations | Reports | Standard Tables

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Institution: Tehran University of Medical Sciences and Health Services

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Contact: Alireza Mosavi-jarrahi

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c/o International Agency for Research on Cancer

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  69372 Lyon Cedex 08
  France
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جدول ASR به ترتیب فراوانی در استانهای کشور در سرطانهای شایع در مردان و زنان بر اساس موارد گزارش شده از دانشگاهها in Males

	Bladder	Breast	Brain & CNS	Colon & Rectum	Corpus Uteri	Esophagus	Hemat. System	Lung	Lymph node	Ovary	Stomach	Prostate	All Sites
Semnan	16.50	0.86	7.16	18.91	0.00	10.53	5.63	13.23	3.35	0.00	34.44	16.01	208.00
Tehran	21.24	1.10	5.25	20.58	0.00	5.16	7.36	10.33	4.72	0.00	20.61	26.35	192.00
East Azarbayejan	19.64	0.49	1.76	14.97	0.00	12.07	10.62	9.32	5.25	0.00	26.61	10.68	171.00
Kordestan	11.41	0.58	4.67	9.80	0.00	11.95	13.84	12.37	4.41	0.00	32.37	9.60	171.00
Yazd	15.46	0.86	4.29	12.30	0.00	2.27	15.19	9.09	5.08	0.00	11.86	16.64	159.00
Hamedan	14.37	0.34	2.61	9.66	0.00	5.63	12.58	13.96	2.80	0.00	22.35	8.40	157.00
khozestan	11.71	0.70	6.25	11.65	0.00	3.59	12.68	12.98	3.57	0.00	13.82	12.40	154.00

جدول ASR به ترتیب فراوانی در استانهای کشور در سرطانهای شایع در مردان و زنان بر اساس موارد گزارش شده از دانشگاهها in Females

	Bladder	Breast	Brain & CNS	Colon & Rectum	Corpus Uteri	Esophagus	Hemat. System	Lung	Lymph node	Ovary	Stomach	Prostate	All Sites
Semnan	3.42	41.51	8.86	9.37	3.54	12.10	7.51	6.30	1.21	4.52	19.12	0.00	188.00
Tehran	5.05	55.84	4.04	16.84	6.72	5.29	5.89	5.10	3.17	7.16	12.39	0.00	183.00
Yazd	3.80	31.43	6.08	14.96	4.68	4.83	13.77	6.35	2.42	4.86	5.88	0.00	168.00
khozestan	5.17	41.00	4.35	10.02	3.72	3.53	8.15	6.93	2.50	4.56	7.78	0.00	156.00
East Azarbayejan	6.19	34.10	1.37	13.32	4.48	13.52	6.17	3.81	2.18	4.97	12.10	0.00	154.00
Mazandaran	2.67	39.80	2.02	11.07	3.50	10.68	5.25	2.48	3.66	3.77	15.57	0.00	142.00
Kordestan	3.28	21.22	3.66	12.67	3.05	15.97	6.79	3.26	2.56	2.52	18.68	0.00	139.00

East Azerbaijan Province is one of the 31 provinces of Iran.
The province covers an area of approximately **47,830** km² .
According to the last Iran Census report , it has a population of **3,724,620** people.
The highest peak of province is Sahand Mountain at 3,722 meters above sea level, Tabriz's elevation ranges between 1,350 and 1,600 m.

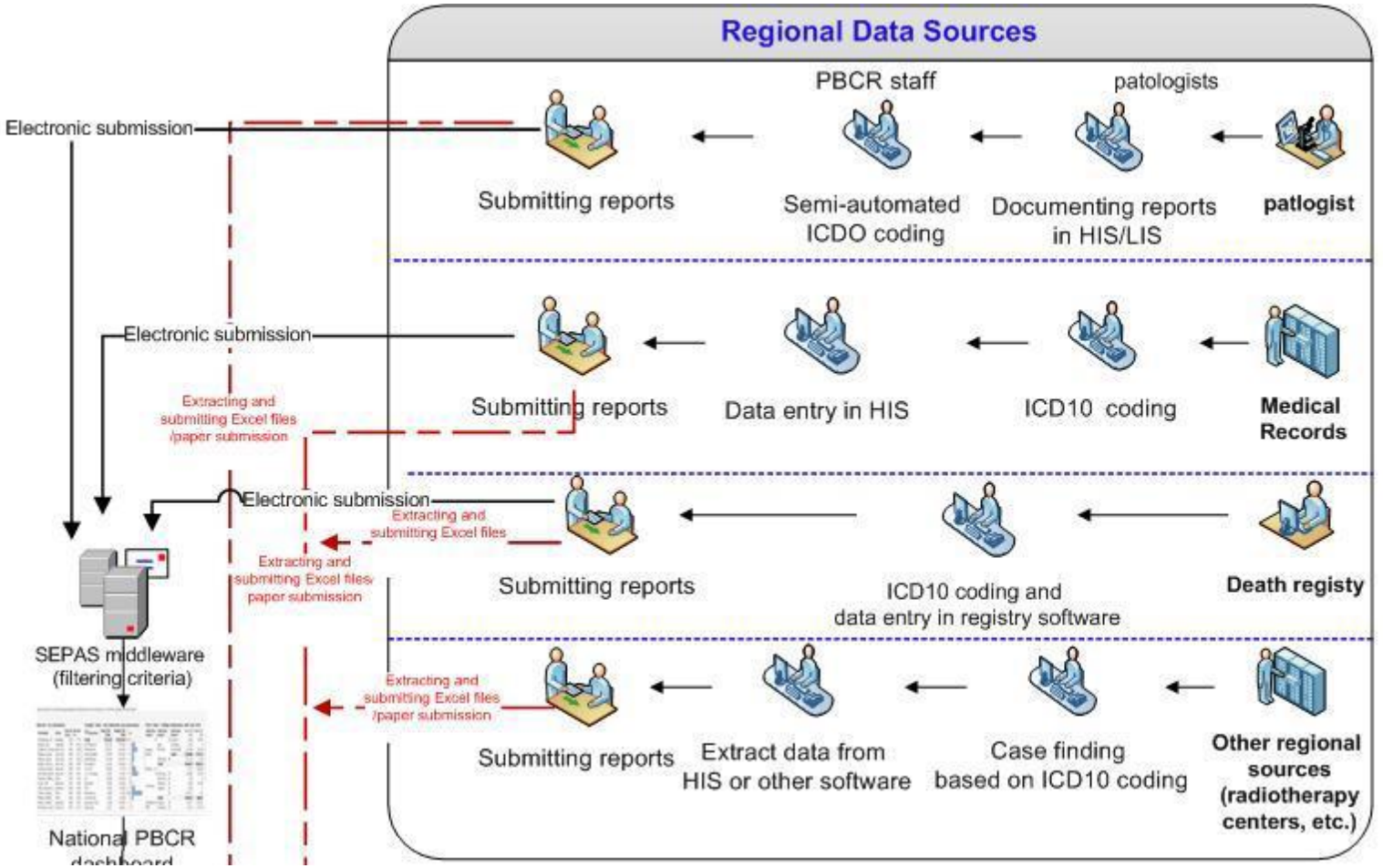
Capital : Tabriz
20 Counties
62 Cities
44 Districts

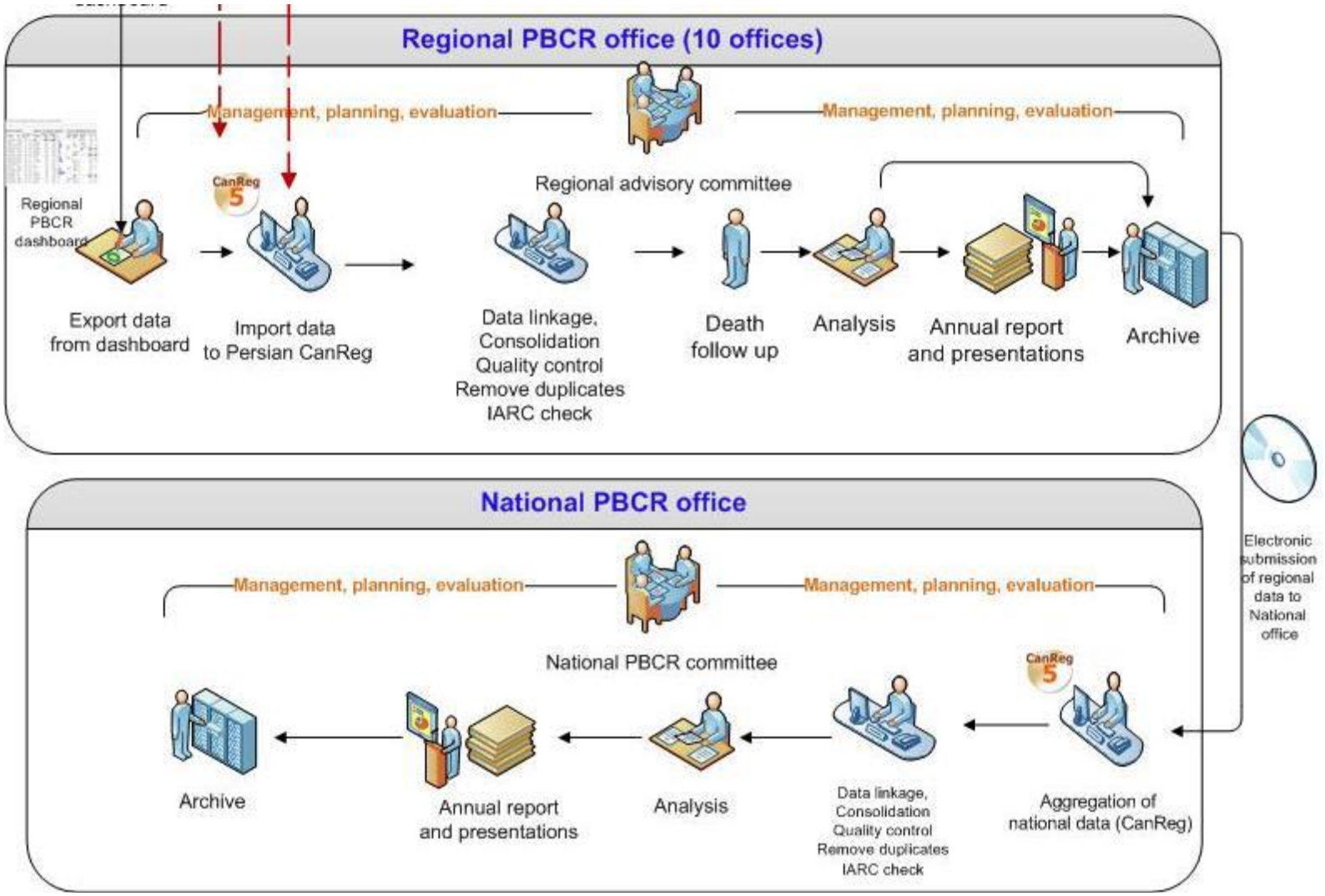
Description of Registry in East Azerbaijan

The Cancer Registry Program was started from 2001 as pathology based program in the state .

There have been an experience of population based cancer registry for one year(2006-2007).

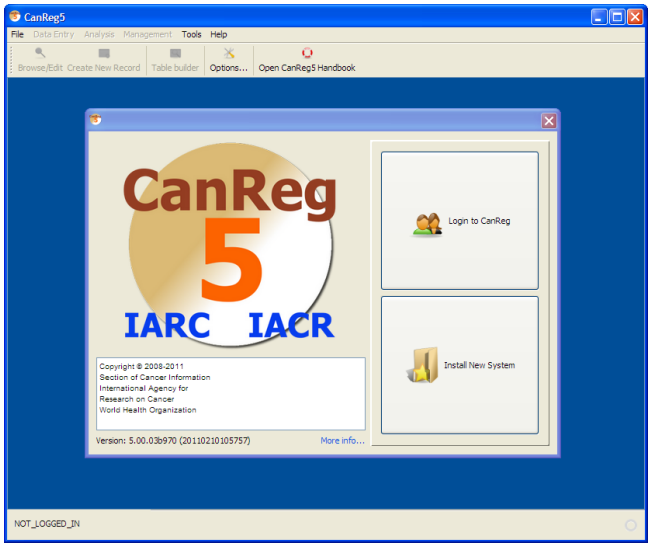
The last Population Based Cancer Registry was started from march 2016 in the state .


Regional Data Sources
PBCR staff
patologists
Electronic submission
Submitting reports
Semi-automated ICDO coding
Documenting reports in HIS/LIS
patlogist
Electronic submission
Submitting reports
Data entry in HIS
ICD10 coding
Medical Records
Extracting and submitting Excel files /paper submission
Electronic submission
Extracting and submitting Excel files
Extracting and submitting Excel files paper submission
Submitting reports
ICD10 coding and data entry in registry software
Death registy
SEPAS middleware (filtering criteria)
Extracting and submitting Excel files /paper submission
Submitting reports
Extract data from HIS or other software
Case finding based on ICD10 coding
Other regional sources (radiotherapy centers, etc.)
National PBCR


Regional PBCR office (10 offices)
Management, planning, evaluation
Management, planning, evaluation
Regional advisory committee
Regional PBCR dashboard
CanReg 5
Export data from dashboard
Import data to Persian CanReg
Data linkage, Consolidation Quality control Remove duplicates IARC check
Death follow up
Analysis
Annual report and presentations
Archive
Electronic submission of regional data to National office
National PBCR office
Management, planning, evaluation
Management, planning, evaluation
National PBCR committee
Archive
Annual report and presentations
Analysis
Data linkage, Consolidation Quality control Remove duplicates IARC check
Aggregation of national data (CanReg)

What is CanReg?

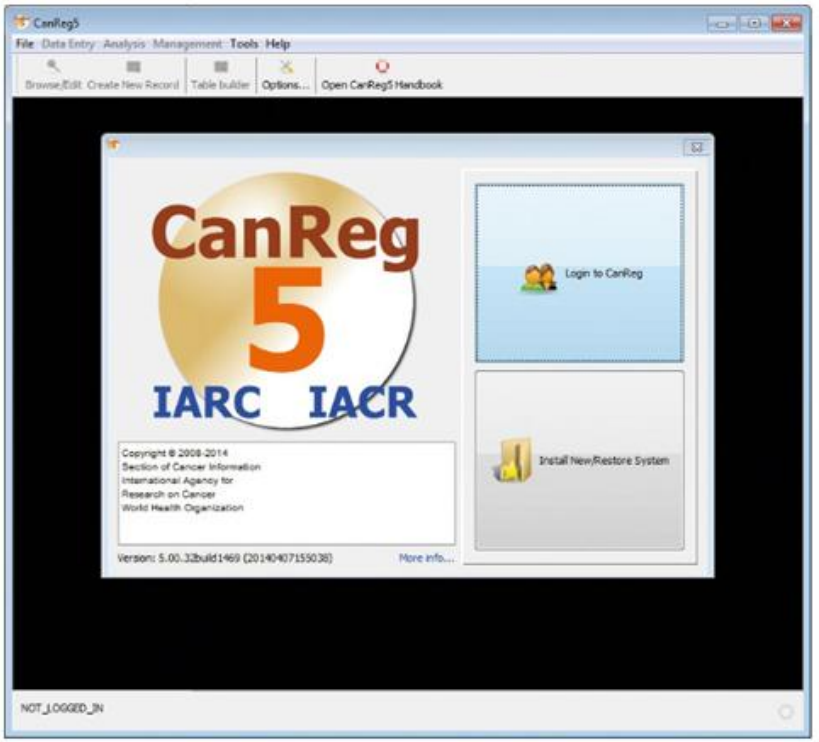
CanReg5 is an open source tool to input, store, check and analyse cancer registry data.
It has modules to do data entry, quality control, consistency checks and basic analysis of the data.



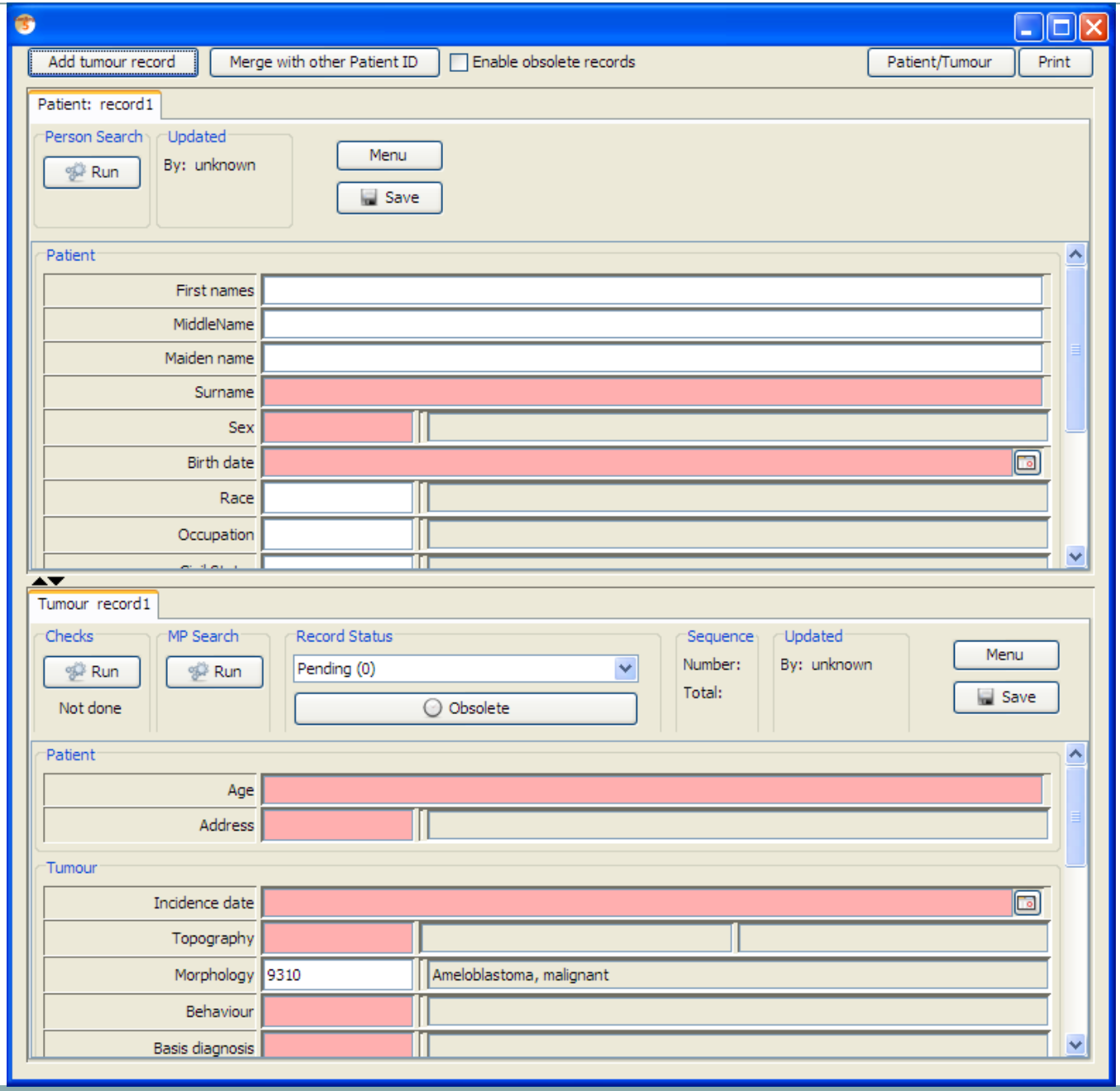
Open Source
By: Morten Johannes Ervik, IARC
Version: September 29, 2015

☐Persian Version
•Supporting Jalali (Solar) Calendar
•Validation of National Code

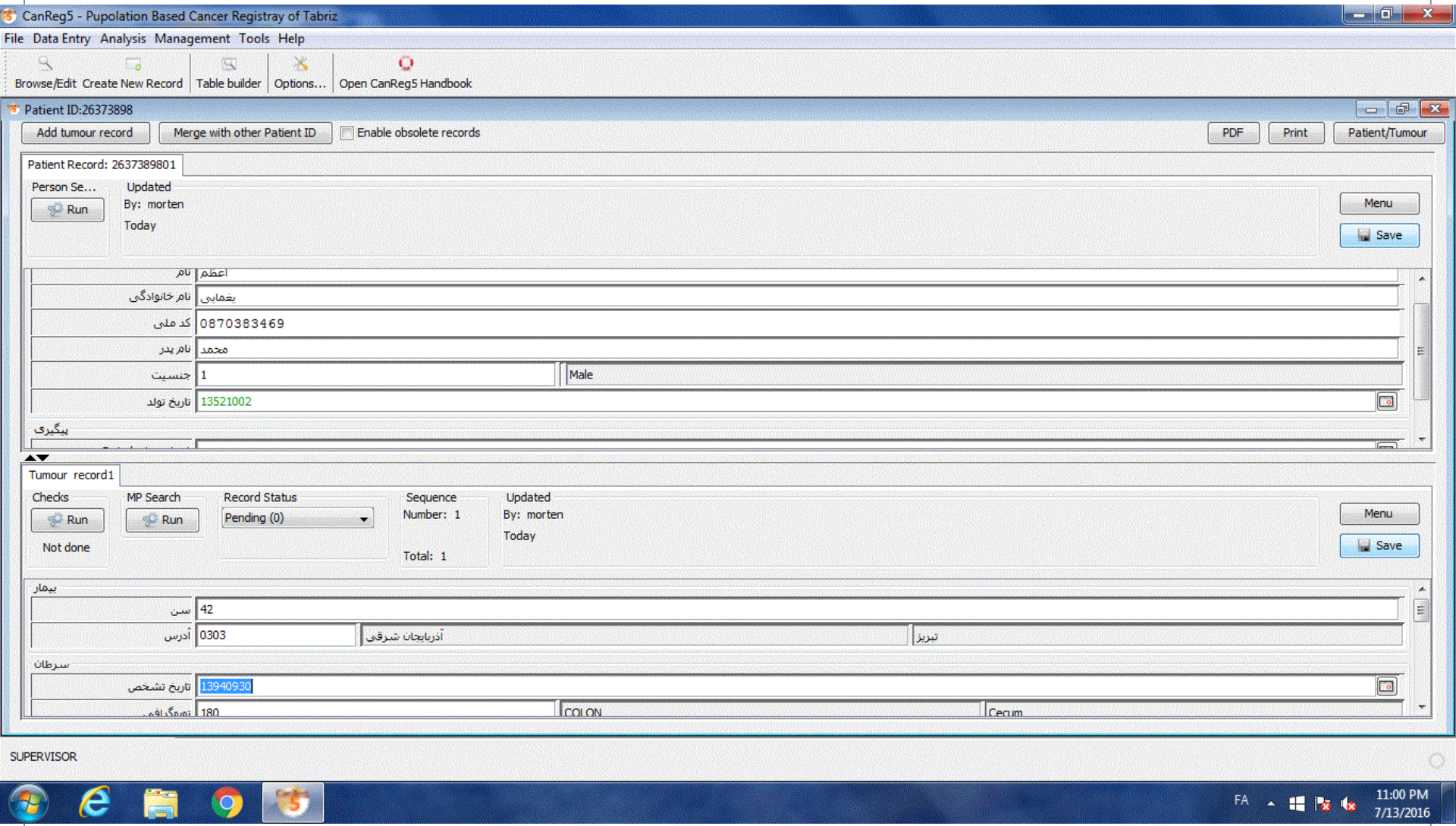
Fig. A1. The CanReg5 welcome window.

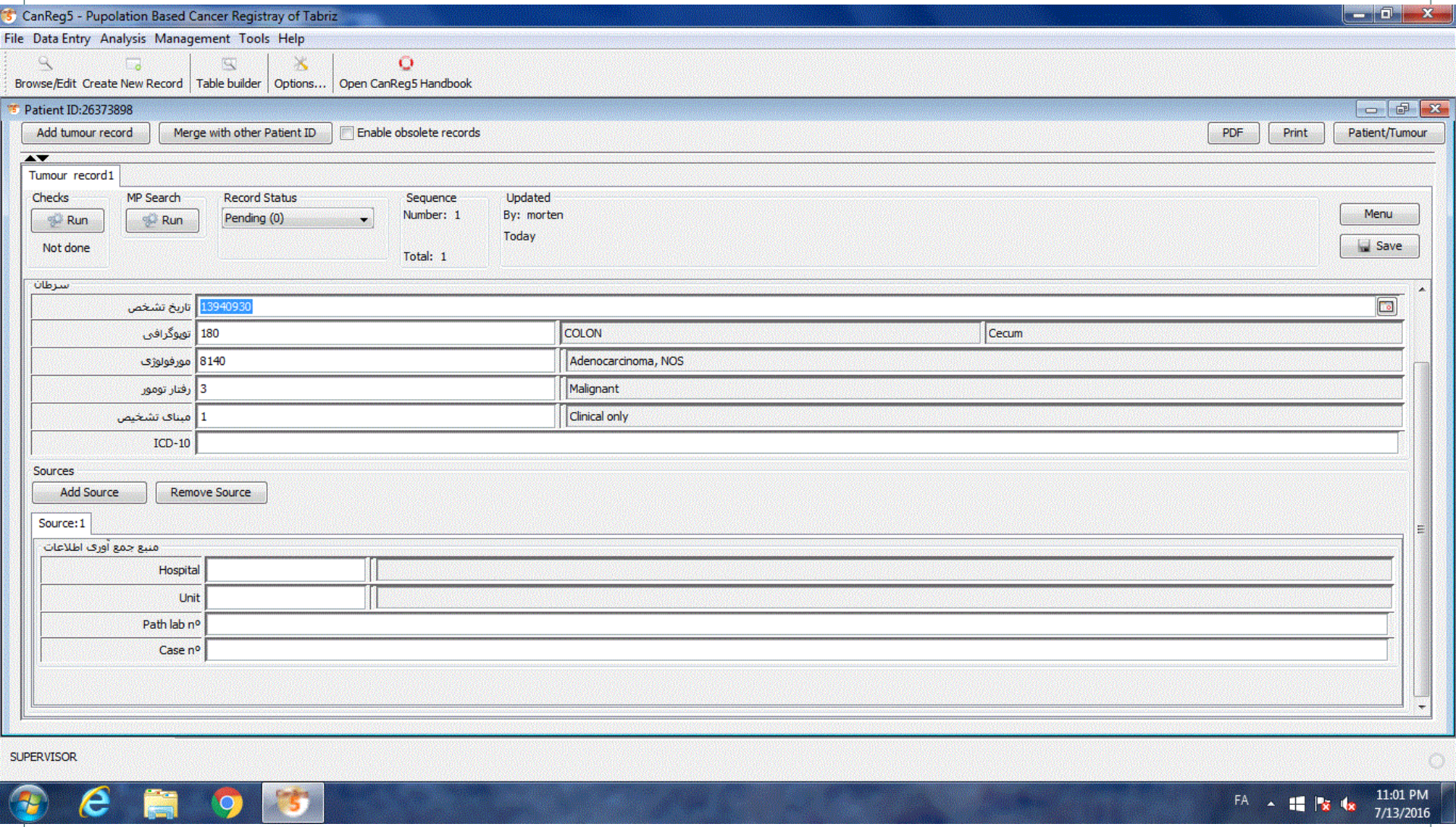


IARC agreement and field visit


Add tumour record
Merge with other Patient ID
Enable obsolete records
Patient/Tumour
Print
Patient: record1
Person Search
Run
Updated
By: unknown
Menu
Save
Patient
First names
MiddleName
Maiden name
Surname
Sex
Birth date
Race
Occupation
Tumour record1
Checks
Run
Not done
MP Search
Run
Record Status
Pending (0)
Obsolete
Sequence
Number:
Total:
Updated
By: unknown
Menu
Save
Patient
Age
Address
Tumour
Incidence date
Topography
Morphology
9310
Ameloblastoma, malignant
Behaviour
Basis diagnosis

The pink fields are the mandatory ones.
System variables:
Person Search Searches for any records that might belong to the same person.
Check Performs various consistency checks (5.2.3 on the following page)on the data you have entered.
Record Status All new records are set to "Pending" and cannot be "Confirmed" until the "Check" and the "Person search" have been successfully performed. Only confirmed cases are used for analysis.
Any variables found in error or query will be marked in red in the data entry form.
There are three sections to the checks:
Mandatory variables Indicates any variables, defined as mandatory for your Registry, that have not been filled in. If the value is really not available, then fill in "9" or "99" etc. - the code for "Unknown".
First Name and Sex Checks the combination of First Name and Sex. e.g. "Mary", "male" would probably be an error! A name that is really used by both sexes can be defined as "Unisex".
Cross checks These are the same consistency checks as in the IARC Tools "Check" program. Some combinations would be marked as errors:
e.g. Sex = Female and Topography = Prostate, while others could be marked as "Rare". Only a Supervisor can confirm a Rare case.


CanReg5 - Pupolation Based Cancer Registray of Tabriz
File Data Entry Analysis Management Tools Help
Browse/Edit Create New Record Table builder Options... Open CanReg5 Handbook
Patient ID:26373898
Add tumour record
Merge with other Patient ID
Enable obsolete records
PDF
Print
Patient/Tumour
Patient Record: 2637389801
Person Se...
Run
Updated
By: morten
Today
Menu
Save
نام
اعظم
نام خانوادگی
یغمایی
کد ملی
0870383469
نام پدر
محمد
جنسیت
1
Male
تاریخ تولد
13521002
پیگیری
Tumour record1
Checks
Run
Not done
MP Search
Run
Record Status
Pending (0)
Sequence
Number: 1
Total: 1
Updated
By: morten
Today
Menu
Save
بیمار
سن
42
آدرس
0303
آذربایجان شرقی
تبریز
سرطان
تاریخ تشخیص
13940930
180
COLON
Cecum
SUPERVISOR
FA
11:00 PM
7/13/2016


CanReg5 - Pupolation Based Cancer Registray of Tabriz
File Data Entry Analysis Management Tools Help
Browse/Edit Create New Record Table builder Options... Open CanReg5 Handbook
Patient ID:26373898
Add tumour record
Merge with other Patient ID
Enable obsolete records
PDF
Print
Patient/Tumour
Tumour record1
Checks
Run
Not done
MP Search
Run
Record Status
Pending (0)
Sequence
Number: 1
Total: 1
Updated
By: morten
Today
Menu
Save
سرطان
تاریخ تشخص
13940930
توپوگرافی
180
COLON
Cecum
مورفولوژی
8140
Adenocarcinoma, NOS
رفتار تومور
3
Malignant
مبنای تشخیص
1
Clinical only
ICD-10
Sources
Add Source
Remove Source
Source:1
منبع جمع آوری اطلاعات
Hospital
Unit
Path lab nº
Case nº
SUPERVISOR
FA
11:01 PM
7/13/2016

- # Patient Record

First name
Surname
Patient ID
Father's name
Sex
Birth date(Solar)
Birth Place(State, City)
Residency (State, City)
Race
Occupation

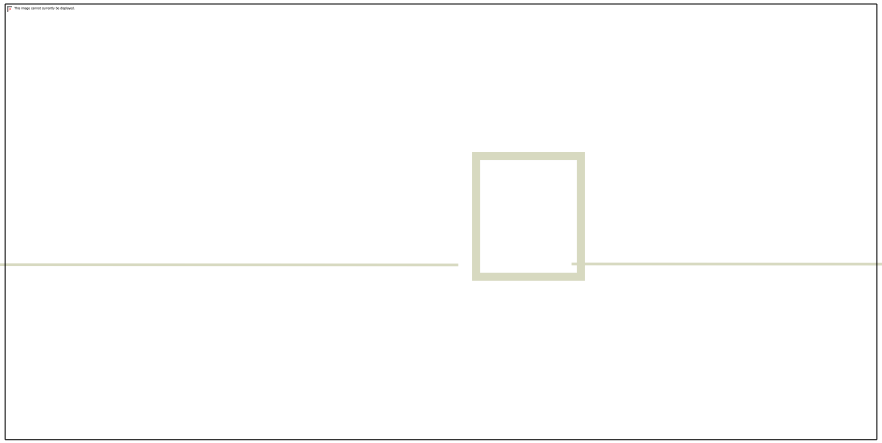
- # Tumor Record

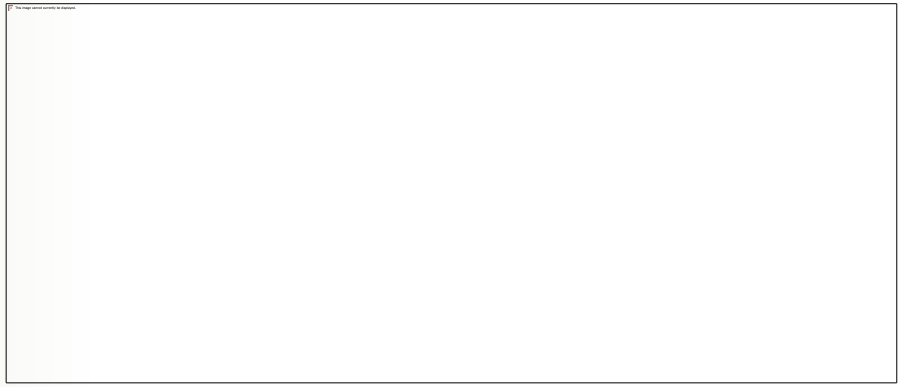
Age
Address
Incidence date
Topography(Site)
Morphology(Histology)
Behavior
Basis diagnosis(Clinical, Cytology, DCO, Histology, Surgery/Autopsy)

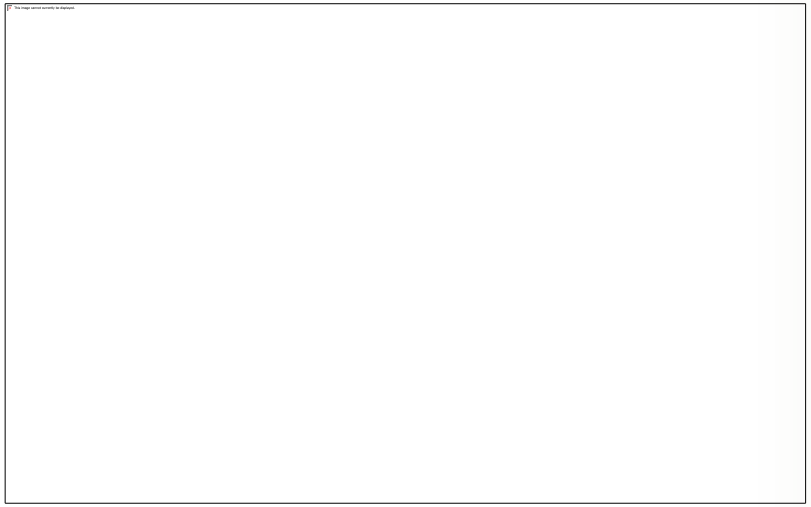
- # Source of Information

Hospital
Unit
Pathology Lab
case

DATA COLLECTION AND SOURCES OF DATA

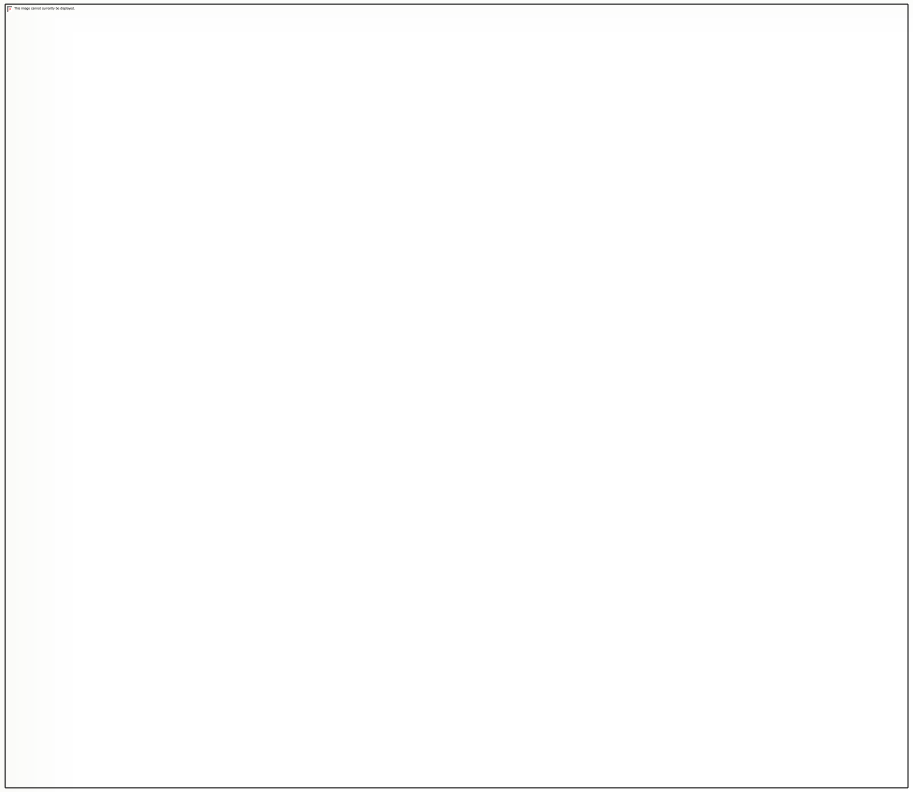


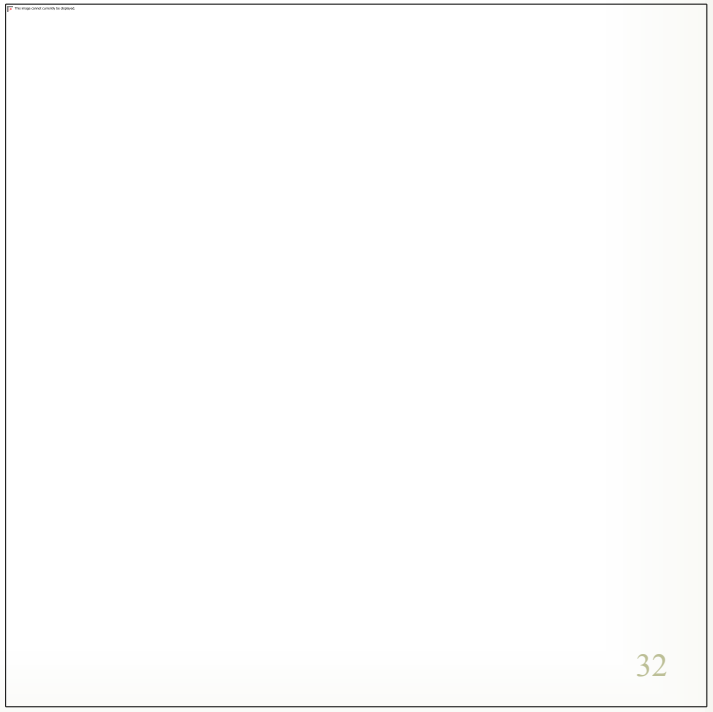




As of future plans we are considering online registration as "Iranian Electronic Health Record System", SEPAS

What we Expected






OH, I FORGOT THAT YOU MISSED THE MEETING. OUR DATA SECURITY TEAM ADDED SOME NEW PROTECTION WHEN ACCESSING PATIENT DATA FILES.
CARTOONSTOCK .com
Search ID: jcen1493
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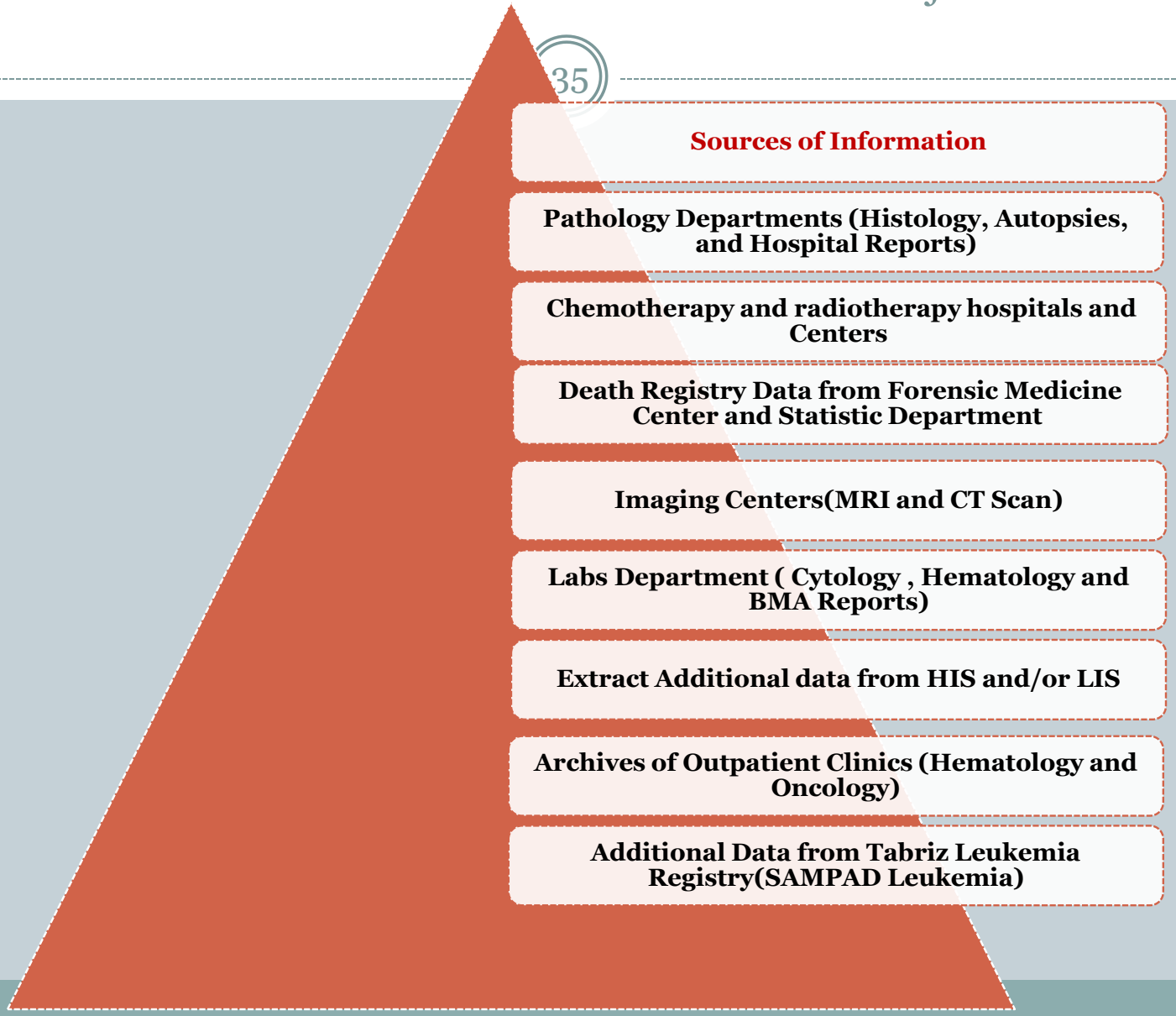
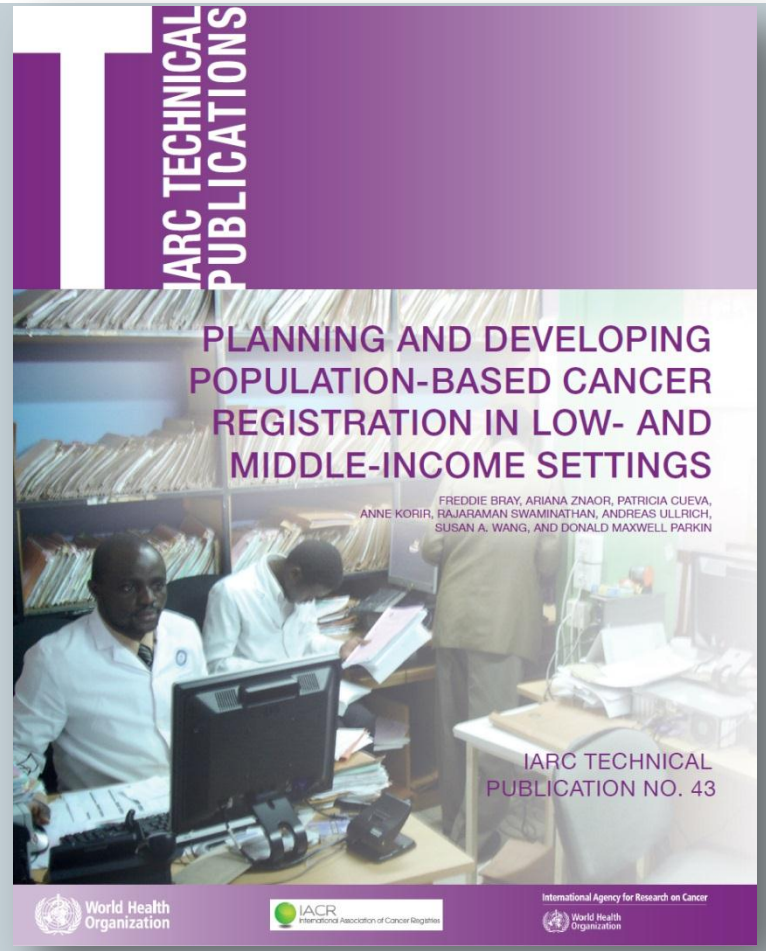
Executive Stages of Cancer Registry

- Establish of the center and recruit staff
- Development of Operational Program and Division of Positions
- Timing of Implementation and Reporting
- Start Date of Registration ,2015 (1394) because of availability of ID
- Collecting the items of information from data sources AMAP
- Development of Lab information technics (LIS) and SEPAS
- Improve data quality (Education, Quality Evaluation, Feedback, and Continuous Monitoring)
- Make contact with sources of data collection and monitoring records (HIS, LIS)
- Create Partnerships and determine methods for data collection
- Presenting Preliminary Report and send feedback to stakeholders

Data Collection for PBCR of East Azerbaijan



IARC Technical Publication No. 43



- A joint IACR-IARC publication
- Developed with WHO with financial support from the GAVI Alliance
- Provides technical advice to planners and health specialists in LMICs wishing to plan/develop population-based cancer registries (PBCR):
  - Role and status of PBCRs worldwide
  - Planning and developing PBCRs
  - Sources of information
  - Quality control
  - Reporting the results

IACR International Association of Cancer Registries

http://www.iarc.fr/en/publications/pdfs-online/treport-pub/treport-

Evaluation of the Registry as a Public Health Surveillance System

جمهوری اسلامی ایران
وزارت بهداشت، درمان و آموزش پزشکی
معاونت تحقیقات و فن آوری

Updated Guidelines for Evaluating Public Health Surveillance Systems

Recommendations from the Guidelines Working Group

Guidelines Working Group

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The following CDC staff members prepared this report:

System attributes:

- Simplicity
- Flexibility
- Data quality
- Acceptability
- Sensitivity
- Predictive value positive
- Representativeness
- Timeliness
- Stability

Key Issues

- Comparability
  - standardization of practices concerning classification and coding of new cases, and consistency in basic definitions of incidence, such as rules for the recording and reporting of multiple primary cancers occurring in the same individual
- Completeness
- Validity or accuracy
- Timelines

C 50 BREAST

ICD-O M	Morphology	n	%
	Female		
1- 8500/3	INFILTRATING DUCT CARCINOMA	6452	76.59%
2- 8520/3	LOBULAR CARCINOMA,NOS	460	5.46%
3- 8000/3	NEOPLASM,MALIGNANT	324	3.85%
4- 8500/2	INTRADUCTAL CARCINOMA,NONINFILTRATING,NOS	243	2.88%
5- 8510/3	MEDULLARY CARCINOMA,NOS	209	2.48%
6- 8010/3	CARCINOMA,NOS	143	1.70%
7- 8522/3	INFILTRATING DUCT AND LOBULAR CARCINOMA	96	1.14%
8- 8480/3	MUCINOUS ADENOCARCINOMA	77	0.91%
9- 8140/3	ADENOCARCINOMA,NOS	48	0.57%
10- 8501/3	COMEDOCARCINOMA,NOS	40	0.47%
	OTHERS	332	3.94%
Total :		8424	
	Male		
1- 8500/3	INFILTRATING DUCT CARCINOMA	136	70.83%
2- 8500/2	INTRADUCTAL CARCINOMA,NONINFILTRATING,NOS	10	5.21%
3- 8000/3	NEOPLASM,MALIGNANT	8	4.17%
4- 8010/3	CARCINOMA,NOS	8	4.17%
5- 8520/3	LOBULAR CARCINOMA,NOS	8	4.17%
6- 8140/3	ADENOCARCINOMA,NOS	3	1.56%
7- 8050/3	PAPILLARY CARCINOMA,NOS	2	1.04%
8- 8510/3	MEDULLARY CARCINOMA,NOS	2	1.04%
9- 8521/3	INFILTRATING DUCTULAR CARCINOMA	2	1.04%
10- 8000/1	NEOPLASM,UNCERTAIN WHETHER BENIGN OR MALIGN	1	0.52%
	OTHERS	12	6.25%
Total :		192	