

Supplementary Material

Of the 236 hospital-based cancer registry (HBCR) centers registered in the National Cancer Registry Programme (NCRP), 58 centers were selected which had completed data transmission and quality checks for 1 or more years during the period 2012–2016 for inclusion in the report. The data of many of these (42 out of 58) hospitals are included for the first time under the National Centre for Disease Informatics and Research-NCRP network. Number (*n*) and relative proportion (%) of new cases reported for all sites of cancer in 58 HBCRs under NCRP are given below.

Supplementary Table S1 Number (*n*) and relative proportion (%) of new cases reported for all sites of cancer in 58 HBCRs under NCRP

S.NO	Registry	Males		Females		Total
		<i>n</i>	%	<i>n</i>	%	<i>N</i>
NORTH						
1.	Postgraduate Institute of Medical Education and Research, Chandigarh (2012–2016)	16,786	55.5	13,432	44.5	30,218
2.	Sher-I-Kashmir Institute of Medical Sciences, Srinagar (2012–2016)	9,433	57.9	6,864	42.1	16,297
3.	Medanta Cancer Centre, Gurgaon (2012–2016)	4,197	54.3	3,527	45.7	7,724
4.	Max Super Specialty Hospital, New Delhi (2013–2016)	4,773	49.7	4,827	50.3	9,600
5.	Dr. B.R. Ambedkar Institute Rotary Cancer Hospital, New Delhi (2012, 2014–2015)	14,649	55.4	11,771	44.6	26,420
6.	Regional Cancer Centre Kamala Nehru Memorial Hospital, Allahabad (2014–2016)	7,011	50.8	6,793	49.2	13,804
7.	Fortis Memorial Research Institute, Gurgaon (2014–2016)	5,105	54.8	4,214	45.2	9,319
8.	Indira Gandhi Institute of Medical Sciences, Patna (2014–2016)	4,391	51.1	4,209	48.9	8600
9.	Regional Cancer Centre Indira Gandhi Medical College, Shimla (2014–2016)	3,045	53.6	2,633	46.4	5,678
10.	Government Medical College, Jammu (2014–2016)	2,846	55.0	2,329	45.0	5,175
11.	Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow (2014–2016)	2,889	56.9	2,186	43.1	5,075
12.	Rajiv Gandhi Cancer Institute, New Delhi (2012–2013)	7,764	56.3	6,020	43.7	13,784
13.	Max Super Specialty Hospital, PPG, Delhi (2015–2016)	1,212	49.3	1,244	50.7	2,456
14.	Mahavir Cancer Sansthan and Research Centre, Patna (2015)	4,040	46.2	4,707	53.8	8,747
15.	Asian Institute of Medical Sciences, Faridabad (2016)	568	51.8	528	48.2	1,096
16.	BPS Government Medical College for Women, Sonapat (2016)	184	71.9	72	28.1	256
17.	Apollo Hospital, Bhubaneswar (2012–2016)	653	61.2	414	38.8	1,067
18.	Tata Medical Center, Kolkata (2015–2016)	4,856	52.6	4,384	47.4	9,240
19.	Acharya Harihar Regional Cancer Centre, Cuttack (2015–2016)	3,549	45.9	4,177	54.1	7,726
20.	Chittaranjan National Cancer Institute, Kolkata (2016)	2,948	51.6	2,768	48.4	5,716
WEST						
21.	Pravara Rural Hospital & Rural Medical College, Loni (2016)	360	43.2	473	56.8	833
22.	Tata Memorial Hospital, Mumbai (2012–2014)	46,621	57.4	34,639	42.6	81,260
23.	The Gujarat Cancer & Research Institute, Ahmedabad (2014–2016)	35,292	61.3	22,266	38.7	57,558
SOUTH						
24.	Regional Cancer Centre, Thiruvananthapuram (2012–2016)	30,066	49.3	30,918	50.7	60,984
25.	Cancer Institute (WIA), Chennai (2012–2016)	20,902	47.2	23,358	52.8	44,260
26.	Amrita Institute of Medical Sciences & Research Centre, Kochi (2012–2016) 10231	10,231	55.7	8127	44.3	18,358
27.	Malabar Cancer Centre, Kannur (2012–2016)	8,190	53.8	7,038	46.2	5,228

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Supplementary Table S1 (Continued)

S.NO	Registry	Males		Females		Total
		<i>n</i>	%	<i>n</i>	%	<i>N</i>
28.	Vydehi Institute of Medical Sciences, Bengaluru (2012–2016) 4212	4212	52.7	3773	47.3	7985
29.	International Cancer Centre, Neyyoor (2012–2016)	1,177	46.2	1,373	53.8	2550
30.	Rural Development Trust, Bathalapalli (2012–2016)	484	25.2	1,437	74.8	1,921
31.	Kidwai Memorial Institute of Oncology, Bengaluru (2012–2015)	15,291	44.9	18,789	55.1	34,080
32.	St. Johns Medical Hospital, Bangalore (2013–2016)	1,911	51.0	1,838	49.0	3,749
33.	JIPMER, Regional Cancer Centre, Puducherry (2014–2016)	5,755	42.2	7,878	57.8	13,633
34.	Govt Arignar Anna Memorial Cancer Hospital & Research Institute Kanchipuram (2014–2016)	1,754	36.0	3,123	64.0	4,877
35.	Shakuntala Memorial Hospital & Research Centre, Hubli (2014–2016)	190	53.5	165	46.5	355
36.	HCG Bangalore Institute of Oncology, Bangalore (2012–2013)	2,633	46.1	3,073	53.9	5,706
37.	HCG NMR Cancer Centre, Hubli (2015–2016)	705	48.5	749	51.5	1,454
38.	Mandya Institute of Medical Sciences, Mandya (2015–2016)	216	50.2	214	49.8	430
39.	A.J. Hospital & Research Centre, Mangalore (2014–2015)	207	57.2	155	42.8	362
40.	SDM College of Dental Sciences and Hospital, Dharwad (2014–2015)	198	78.3	55	21.7	253
41.	Indo-American Cancer Institute & Research Centre, Hyderabad (2012)	3,137	40.3	4,652	59.7	7,789
42.	Government Medical College, Thrissur (2014)	1,724	53.8	1,478	46.2	3,202
43.	Narayana Hrudayalaya Health City, Bangalore (2016)	843	56.5	649	43.5	1,492
44.	Erode Cancer Centre, Thindal, Erode (2012)	493	43.2	648	56.8	1,141
45.	Father Muller Medical College Hospital, Mangalore (2016)	426	45.6	508	54.4	934
46.	General Hospital, Ernakulum (2012)	344	51.0	330	49.0	674
47.	MES Medical College & Hospital, Perinthalmanna (2016)	281	53.2	247	46.8	528
48.	Regional Cancer Centre, Raipur (2012–2016)	4,797	43.1	6,324	56.9	11,121
49.	Gandhi Medical College, Bhopal (2012–2015)	2,776	50.8	2,690	49.2	5,466
50.	Cancer Hospital & Research Institute, Gwalior (2014–2016)	5,192	59.5	3,534	40.5	8,726
51.	RST Regional Cancer Hospital, Cancer Relief Society, Nagpur (2012–2016)	6,632	50.8	6,416	49.2	13,048
NORTH EAST						
52.	Dr. B. Borooah Cancer Institute, Guwahati (2012–2016)	23,638	57.8	17,269	42.2	40,907
53.	Cachar Cancer Hospital, Silchar (2012–2016)	4,806	58.0	3,483	42.0	8,289
54.	Assam Medical College – Dibrugarh (2012–2016)	2,803	49.1	2,910	50.9	5,713
55.	Regional Cancer Centre, Agartala (2014–2016)	3,111	57.5	2,296	42.5	5,407
56.	North East Cancer Hospital & Research Institute, Guwahati (2014–2016)	2,321	62.6	1,384	37.4	3,705
57.	Regional Institute of Medical Sciences, Imphal (2014–2016)	1,272	44.6	1,583	55.4	2,855
58.	Mizoram State Cancer Institute (Civil Hospital), Aizawl (2014–2016)	1,503	53.0	1,332	47.0	2,835
TOTAL		353,393	52.9	314,273	47.1	667,666

Table 2 The relative proportion of specific sites of cancer associated with use of tobacco by region

Anatomical sites of cancer	Males		Females	
	<i>n</i>	%	<i>n</i>	%
NORTH				
Lip (C00)	207	1.1	60	1.1
Tongue (C01–C02)	2,735	14.3	588	10.7
Mouth (C03–C06)	3,072	16.0	614	11.2
Oth. Oropharynx (C10)	706	3.7	114	2.1
Hypopharynx (C12–C13)	857	4.5	160	2.9
Pharynx unspecified (C14)	67	0.3	17	0.3
Esophagus (C15)	2,551	13.3	1,766	32.3
Larynx (C32)	2,224	11.6	240	4.4
Lung (C33–C34)	5,945	31.0	1,769	32.3
Urinary bladder (C67)	817	4.3	145	2.6
TOTAL	19,181	100	5,473	100
EAST				
Lip (C00)	25	1.1	17	2.3
Tongue (C01–C02)	303	13.3	97	13.1
Mouth (C03–C06)	584	25.6	273	37
Oth. Oropharynx (C10)	46	2.0	9	1.2
Hypopharynx (C12–C13)	93	4.1	22	3.0
Pharynx unspecified (C14)	7	0.3	2	0.3
Esophagus (C15)	165	7.2	62	8.4
Larynx (C32)	156	6.8	14	1.9
Lung (C33–C34)	772	33.8	218	29.5
Urinary bladder (C67)	131	5.7	24	3.3
TOTAL	2,282	100	738	100
WEST				
Lip (C00)	229	1.4	67	1.6
Tongue (C01–C02)	3,076	19.1	791	18.5
Mouth (C03–C06)	5,578	34.6	1,258	29.5
Oth. Oropharynx (C10)	305	1.9	33	0.8
Hypopharynx (C12–C13)	982	6.1	251	5.9
Pharynx unspecified (C14)	179	1.1	31	0.7
Esophagus (C15)	1,301	8.1	748	17.5
Larynx (C32)	1,051	6.5	98	2.3
Lung (C33–C34)	2,975	18.5	910	21.3
Urinary bladder (C67)	436	2.7	83	1.9
TOTAL	16,112	100	4,270	100
SOUTH				
Lip (C00)	149	0.6	131	1.4
Tongue (C01–C02)	3,897	16.0	1,417	15.5
Mouth (C03–C06)	4,747	19.5	3,106	33.9
Oth. Oropharynx (C10)	1,088	4.5	103	1.1
Hypopharynx (C12–C13)	1,906	7.8	667	7.3

(Continued)

Table 2 (Continued)

Anatomical sites of cancer	Males		Females	
	<i>n</i>	%	<i>n</i>	%
Pharynx unspecified (C14)	94	0.4	35	0.4
Esophagus (C15)	2,453	10.1	1,538	16.8
Larynx (C32)	2,914	12.0	248	2.7
Lung (C33–C34)	6,352	26.1	1,763	19.2
Urinary bladder (C67)	717	2.9	155	1.7
TOTAL	24,317	100	9,163	100
CENTRAL				
Lip (C00)	90	1.6	41	2.5
Tongue (C01–C02)	1,243	21.6	309	18.8
Mouth (C03–C06)	2,593	45.0	735	44.8
Oth. Oropharynx (C10)	75	1.3	6	0.4
Hypopharynx (C12–C13)	231	4.0	61	3.7
Pharynx unspecified (C14)	42	0.7	15	0.9
Esophagus (C15)	388	6.7	197	12.0
Larynx (C32)	471	8.2	57	3.5
Lung (C33–C34)	527	9.2	193	11.8
Urinary bladder (C67)	97	1.7	27	1.6
TOTAL	5,757	100	1,641	100

Supplementary Table S3 Number of cases (*n*) registered for lung cancer and its relative proportion to all sites of cancer (%), crude (CR), age-adjusted (AAR), and truncated (TR) incidence rates per 100,000 population and its rank in 28 PBCRs under NCRP (males)

MALES							
S. No	Registry	<i>n</i>	%	CR	ARR	TR	Rank
NORTH							
1	Delhi	3,249	10.5	11.8	16.7	27.9	9
2	Patiala district	374	6.9	7.0	7.7	15.8	24
SOUTH							
3	Hyderabad	561	10.9	9.2	12.4	18	14
4	Kollam district	1,833	18.5	29.4	23.1	34.7	3
5	Thiruvananthapuram	1,685	12.5	21.3	16.8	27.3	8
6	Bangalore	1,335	10.1	9.8	13.0	19.1	12
7	Chennai	1,397	9.7	11.8	11.9	18.1	17
EAST							
8	Kolkata	2,040	20	22	18.3	28.1	5
WEST							
9	Ahmedabad urban	1,188	8.1	7.3	8.8	13.9	21
10	Aurangabad	216	11.2	6.4	8.8	14.3	22
11	Osmanabad and Beed	177	4.9	1.9	1.9	3.5	31
12	Barshi rural	25	3.4	1.9	1.8	3.6	32
13	Mumbai	2,554	9.7	9.5	11.0	14.5	19
14	Pune	735	7.6	5.1	6.7	9.3	26

Supplementary Table S3 (Continued)

MALES							
S. No	Registry	<i>n</i>	%	CR	ARR	TR	Rank
CENTRAL							
15	Wardha district	170	7.1	5.0	4.6	8.5	30
16	Bhopal	390	10.9	9.1	12.0	20.2	16
17	Nagpur	368	6.2	5.5	6.1	9.8	28
18	Manipur state	698	18.9	8.9	12.9	12.5	13
19	Imphal West	207	18.2	15.5	17.8	17.2	7
20	Mizoram state	618	14.3	20.9	32.1	41.1	2
21	Aizawl district	287	13.2	27.1	38.8	50.3	1
22	Sikkim state	83	7.1	4.9	6.5	8.1	27
23	Tripura state	1,103	16.8	11.3	14.5	23.1	10
24	West Arunachal	79	6.5	3.7	7.0	14.3	25
25	Papum Pare	38	8.1	7.6	20.1	38.0	4
26	Meghalaya	286	6.1	5.6	12.4	21.7	15
27	East Khasi Hills	153	5.3	6.9	14.1	22.4	11
28	Nagaland	84	6.0	4.5	8.4	12.2	23
29	Pasighat	25	7.8	7.1	9.7	19.8	20
30	Cachar district	400	8.6	8.5	11.9	18.4	18
31	Dibrugarh district	135	5.3	3.9	5.1	7.6	29
32	Kamrup urban	494	7.9	15.1	18.1	23.9	6

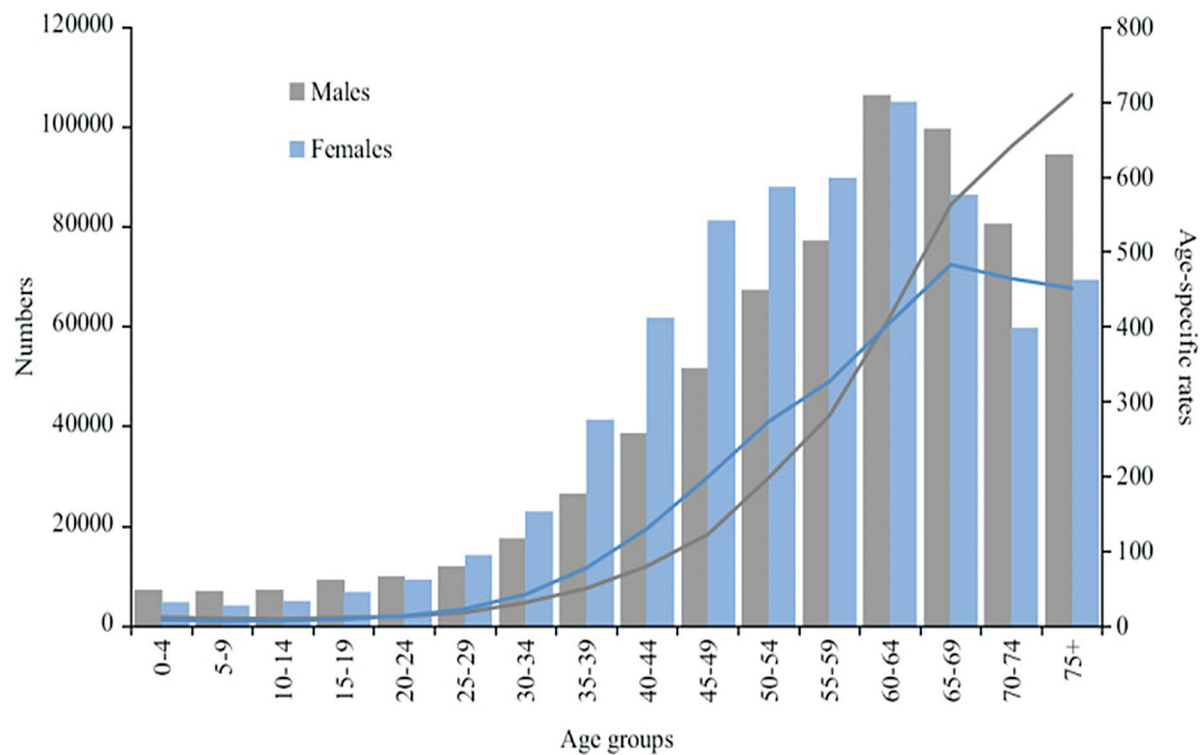
Supplementary Table S4 Number of cases (*n*) registered for lung cancer and its relative proportion to all sites of cancer (%), crude (CR), age-adjusted (AAR), and truncated (TR) incidence rates per 100,000 population and its rank in 28 PBCRs under NCRP (females)

FEMALES							
S. No	Registry	<i>n</i>	%	CR	ARR	TR	Rank
NORTH							
1	Delhi	962	3.3	4.0	5.1	9.2	13
2	Patiala district	134	2.2	2.8	2.8	5.4	26
SOUTH							
3	Hyderabad	262	4.1	4.5	6.0	11.6	8
4	Kollam district 359	359	3.7	5.1	3.8	6.8	22
5	Thiruvananthapuram	545	3.8	6.3	4.7	8.1	15
6	Bangalore	596	3.8	4.7	5.8	10.5	11
7	Chennai	555	3.3	4.7	4.4	7.7	16
EAST							
8	Kolkata	602	6.6	7.0	5.9	10.6	9
WEST							
9	Ahmedabad urban	311	2.8	2.1	2.4	3.9	28
10	Aurangabad	79	3.9	2.5	3.2	5.7	25
11	Osmanabad and Beed	93	2.1	1.1	1.0	2.1	32
12	Barshi rural	26	3.2	2.1	1.9	3.8	31
13	Mumbai	1,390	5.1	6.0	5.9	8.0	10
14	Pune	449	4.2	3.5	4.0	7.0	20

(Continued)

Supplementary Table S4 (Continued)

FEMALES							
S. No	Registry	n	%	CR	ARR	TR	Rank
15	Wardha district	85	3.4	2.6	2.3	4.6	29
16	Bhopal	114	3.2	2.9	3.6	7.4	23
17	Nagpur	177	2.9	2.7	2.7	5.1	27
18	Manipur state	649	14.4	8.3	11.8	14.4	5
19	Imphal West	215	14.3	15.5	16.6	21.5	3
CENTRAL							
20	Mizoram state	528	14.1	18	27.6	30.7	2
21	Aizawl district	304	16.0	27.9	37.9	34.1	1
22	Sikkim state	73	6.5	4.9	7.1	9.1	6
23	Tripura state	263	5.4	2.8	3.3	5.6	24
24	West Arunachal	46	3.9	2.2	5.0	9.7	14
25	Papum Pare	21	4.0	4.2	12.8	21.8	4
26	Meghalaya	116	4.1	2.3	4.3	7.9	17
27	East Khasi Hills	70	4.0	3.1	5.3	8.7	12
28	Nagaland	37	3.7	2.1	4.3	8.2	18
29	Pasighat	9	3.0	2.6	4.2	7.2	19
30	Cachar district	125	3.2	2.8	3.9	6.9	21
31	Dibrugarh district	52	2.3	1.5	2.0	3.6	30
32	Kamrup urban	181	3.8	5.7	6.7	13.1	7



Supplementary Fig. S1 Estimated age-wise number and incidence rate for all sites of cancer by sex–2024.