				Mortality					Incidence
Country	Coverage III-defined				Coverage				
	(%)	(%) <sup>a</sup>	Method <sup>b</sup>		Exceptions	(%)	Meth		Exceptions
Albania	53	11/19	3B	Estimated from incidence with I:M ratios from Montenegro and Serbia		100	2a	2015-2017 = 2022	Anus, vulva, and vagina cancers: the age-specific numbers were computed using the proportion of anus vs rectum (C19-20) and vulva and vagina vs ovary (C56) recorded in Montenegro (2013) and Central Serbia. Non-melanoma skin cancers: rate from Serbia applide to 2022 population
Austria	100	4/3	1	2010-2019 🗷 2022	Cervical and corpus cancers estimated using survival (source EUROCARE-5)	100	1	2008-2017 / 2022	Non-melanoma skin cancers: rates from Vorarlberg (2013-2017) applied to 2022 national population.
Belgium	100	7/9	1	2009-2018 🗷 2022	Cervical and corpus cancers estimated using survival (source EUROCARE-5)	100	1	2010-2019 / 2022	
Bosnia Herzegovina	95	20/19	2A	2014, 2016-2019 = 2022		40	3a	Estimated from mortality (all ages) using M:I ratios from Republika of Srpska (2008-2012) <sup>9</sup>	The number of all ages were partitioned by age using the age distribution from Republika of Srpska (2008-2012) cancer registry <sup>f</sup> Data supplied to CI5 Vol. XI, but not included (http://www.iacr.com.fr/index.php).
Bulgaria	100	5/5	1	2010-2019 / 2022	-	100	1	2008-2017 / 2022	
Croatia	100	1/1	1	2010-2019 🗷 2022	Cervical and corpus cancers estimated using survival (source EUROCARE-5)	100	1	2008-2017 / 2022	Non-melanoma skin cancers: average of the rates from Republika of Srpska <sup>f</sup> (2008-2012) and Slovenia (2013-2017) applied to 2022 population.
Cyprus <sup>9</sup>	68	2/4	1	2009-2018 / 2022	,	100	1	2008-2017 / 2022	Thyroid cancer: most recent rates (2010-2012) applied to the 2022 population.
Czechia	100	2/2	1	2010-2019 🗡 2022		100	1	2008-2017 / 2022	P P P P P P P P P P P P P P P P P P P
Denmark	100	9/12	1	2009-2018 🗷 2022	Cervical and corpus cancers estimated using survival (source NORDCAN)	100	1	2008-2017 / 2022	
Estonia	100	2/2	1	2010-2019 🗡 2022		100	1	2010-2019 / 2022	
Finland	100	1/1	1	2010-2019 7 2022	Including Eurostat data for 2019	100	1	2008-2017 / 2022	non-melanoma skin, gallbladder, ovarian, penile and bladder cancers; mesothelioma: rates from Finnish cancer registry (2013-2017)
France	100	11/13	1	2007-2016 / 2022	Cervical and corpus cancers estimated using survival (source EUROCARE-5)	18	3a	Estimated from mortality using M:I ratios from 15 local cancer registries	Thyroid cancer: rates (2008-2017) from 13 cancer registries were projected to 2022 and applied to the 2022 national population. Kaposi sarcoma, breast, prostate and childhood cancers: rates from the registries used in the model were applied to the 2022 national population. Non-melanoma skin cancers: rates (2003-2012)2 from Haut- Rhin Cancer registry were projected to 2022 and applied to national population.
Germany	100	5/4	1	2010-2019 > 2022	Cervical and corpus cancers estimated using survival (source EUROCARE-5)	58	3a	Estimated from mortality using M:I ratios from 8 local cancer registries	Thyroid cancer: rates (2008-2017) from 5 cancer registries were projected to 2022 and applied to the 2022 national population. Kaposi sarcoma, breast, prostate and childhood cancers: rates from the registries used in the model were applied to the 2022 national population. Non-melanoma skin cancers: rates (2008-2017) from 3 cancer registries covering 14% of national population were projected to 2022 and applied to national population estimates.
Greece	100	7/12	1	2010-2019 / 2022	Kaposi sarcoma; mesothelioma; vulva, vagina and penile cancers 2014-2019	0	3b	Estimated from mortality using the 'Southern Europe' model <sup>d</sup>	Kaposi sarcoma, non-melanoma and childhood cancers: most recent rates used in the model were applied to 2022 national population.
Hungary	100	0/0	1	2010-2019 / 2022		0	3b	Estimated from mortality using the 'Eastern Europe' model <sup>h</sup>	For thyroid cancer and Hodgkin lymphoma, rates from the cancer registries used in modellisation were applied to 2022 national population.
Iceland	100	3/1	1	2010-2019 / 2022		100	1	2008-2017 / 2022	
Ireland	100	0/1	1	2009-2018 / 2022	Including Eurostat data for 2016- 2017	100	1	2008-2017 / 2022	
Italy	100	2/3	1	2010-2019 / 2022	Cervical and corpus cancers estimated using survival (source EUROCARE-5) Including Eurostat data for 2018-2019	50	3a	Estimated from mortality using M:I ratios from 36 local cancer registries	Breast and thyroid cancers: rates (2008-2017) from 14 cancer registries were projected to 2022 and applied to the 2022 national population. Kaposi sarcoma, prostate and childhood cancers: rates from 38 cancer registries were applied to the 2022 national population. Non-melanoma skin cancers: rates (2003-2012) from 5 cancer registries were projected to 2022 and applied to the 2022 national population.
Latvia	100	2/1	1	2010-2019 / 2022		100	1	2008-2017 / 2022	
Lithuania	99	3/1	1	2010-2019 / 2022		100	1	2008-2017 / 2022	

Country				Mortality					Incidence
	Courses				For setting	Courses		-10	
	Coverage (%)	Ill- defined (%)ª	Meth		Exceptions	Coverage (%)	Metho		Exceptions
Luxembourg	100	4/6	1	2010-2019 7 2022		0	3b	Estimated from mortality (2015-2019) <sup>i</sup> with M:I ratios from cancer registries in Belgium and France	Estimated annual number of cases (2015-2019) completed by recorded inciden cases 2013 (source national pathology-based register <sup>i</sup> )
Malta	100	0/1	1	2010-2019 / 2022	Including Eurostat data for 2018-2019	100	1	2008-2017 / 2022	
Moldova	80	1/0	1	2009-2018 / 2022		0	3b	Estimated from mortality using M:I ratios from Ukraine (2013-2015) national cancer registry.	
Montenegro	94	26/30	2 A	2019 = 2022		0	3b	Estimated from mortality using the 'Southern Europe' modeld	Kaposi sarcoma, Hodgkin lymphoma, thyroid and childhood cancers, incidence rates (2013) <sup>k</sup> were applied to 2022 population.
North Macedonia	100	27/27	1	2010-2019 / 2022		0	3b	Estimated from mortality using the 'Southern Europe' model <sup>d</sup>	
Norway	100	6/6	1	2010-2019 / 2022	Cervical and corpus cancers estimated using survival (source NORDCAN) Including Eurostat data 2017-2019	100	1	2008-2017 / 2022	
Poland	100	13/13	1	2010-2019 / 2022	Cervical and corpus cancers estimated using survival (source EUROCARE-5)	33	3a	Estimated from mortality using M:I ratios from six local cancer registries	Breast, prostate and thyroid cancers: rates (2008-2017) from two cancer registries were projected to 2022 and applied to the 2022 national population. Kaposi sarcoma, non-melanoma skin and childhood cancers: rates from the six cancer registries used in the model were applied to the 2022 national populatio
Portugal	100	6/8	1	2010-2019 / 2022	Cervical and corpus cancers estimated using survival (source EUROCARE-5) Including Eurostat data for 2019	83	3a	Estimated from mortality using M:I ratios from 3 local cancer registries (period 2013-2016).	For liver, pancreatic and lung cancers, cases was supplemented with corresponding deaths in the model (by registry, year, sex and age). Kaposi sarcoma, non-melanoma skin, breast, prostate, thyroid and childhood cancers: rates from the 3 cancer registries used in the model were applied to the 2022 national population.
Romania	100	2/1	1	2009-2018 / 2022		0	3a/ 3b	Estimated from mortality, using a set of age-, sex-, site-specific M:I ratio obtained by the aggregation of a recorded data from timisoara cancer registry and from the 'Eastern Europe' model <sup>h</sup>	
Serbia	94	10/8	1	2010-2019 <sup>m</sup> ≁ 2022		0	3a/ 3b	Estimated from mortality, using a set of age-, sex-, site-specific M:I ratio obtained by the aggregation of a recorded data from Central Serbia and from the 'Southern Europe' model <sup>d</sup>	Kaposi sarcoma and childhood cancers: rates (2013-2017) from Central Serbia applied to the 2022 national population.
Slovakia	100	3/5	1	2010-2019 / 2022		0	3b	Estimated from mortality using the 'Eastern Europe' model	
Slovenia	100	5/3	1	2010-2019 🗡 2022	Cervical and corpus cancers estimated using survival (source EUROCARE-5)	100	1	2009-2018 / 2022	
Spain	100	2/3	1	2010-2019 / 2022	Cervical and corpus cancers estimated using survival (source EUROCARE-5)	23	3a	Estimated from mortality using M:I ratios from 11 local cancer registries	Breast, prostate and thyroid cancers: rates (2008-2017) from 9 cancer registrie projected to 2022 and applied to the 2022 national population. Kaposi sarcoma non-melanoma skin and childhood cancers: rates from the 11 cancer registries used in the model applied to the 2022 national population.
Sweden	100	3/4	1	2010-2019 / 2022	Cervical and corpus cancers estimated using survival (source NORDCAN) Including Eurostat data for 2019	100	1	2008-2017 / 2022	Non-melanoma skin, gallbladder, ovarian, penile and bladder cancers; mesothelioma: rates from Swedish cancer registry (2013-2017). Liver and pancreatic cancers cases completed by cancer deaths (source WHO).
Switzerland	100	8/7	1	2010-2019 / 2022	Cervical and corpus cancers estimated using survival (source EUROCARE-5) Including Eurostat data for 2019	62	3a	Estimated from mortality using M:I ratios from 13 local cancer registries	Breast and thyroid cancers: rates (2008-2017) from 10 cancer registries were projected to 2022 and applied to the 2022 national population. Kaposi sarcoma and Hodgkin lymphoma; nasopharyngeal, anus, vulva, vagina, penile, testis and childhood cancers: rates from the 13 cancer registries used in the model were applied to the 2022 national population. Non-melanoma skin cancers: rates (2013-2017) from 5 cancer registries were applied to the 2022 national population.
The Netherlands	100	6/6	1	2010-2019 🗡 2022		100	1	2008-2017 / 2022	Liver and pancreatic cancers: cases (2008-2017) completed by deaths (source WHO).
Ukraine <sup>e</sup>	92	4/5	1	2008-2017 / 2022	Data of gallbladder, testis, kidney, thyroid cancers and Hodgkin lymphoma plus "other cancers" from National Cancer Registry of Ukraine <sup>e</sup>	100	1	2008-2017 / 2022	
United Kingdom	100	2/4	1	2010-2019 / 2022	Cervical and corpus cancers estimated using survival (source EUROCARE-5)	100	1	(Pooled England, Northern Ireland, and Scotland rates) 2010-2019 7 2022	Non-melanoma skin cancers: combined rates from Northern Ireland and Scotlar (2008-2017) applied to 2022 population.

National cancer mortality data from 2007 to 2019 were extracted from WHO mortality database, unless otherwise specified. National and local cancer incidence data from 2003 to 2019 were received from national and local population-based cancer registries, unless otherwise specified.

## $\mathcal{N}'$ projected to =' applied to

<sup>a</sup> Percentages of ill-defined causes of death, most recent year of WHO data, male/female

<sup>b</sup> The method to estimate the national sex and age-specific mortality rates in 2022 is based on estimated numbers obtained as: 1 - Estimates based on national mortality data, projected rates applied to 2022 population

2A - Estimates based on national mortality data, most recent available rates applied to 2022 population

3B - Estimates based on national mortality estimates and M:I ratios derived from cancer registry data of neighbouring countries

<sup>c</sup> The methods to estimate the national sex and age-specific incidence rates in 2022 are based on estimated numbers obtained as: 1 - Estimates based on national or local (coverage greater than 50%) incidence data, projected rates applied to 2022 population 2A - Estimates based on national incidence data, most recent available rates applied to 2022 population

3A - Estimates based on national mortality estimates and M:I ratios derived from country-specific cancer registry data

3B - Estimates based on national mortality estimates and M:I ratios derived from cancer registry data of neighbouring countries

<sup>d</sup> Southern Europe model includes Bulgaria, Croatia, Serbia, and Slovenia

<sup>e</sup> Data source: National Cancer Registry of Ukraine, National Institute of Cancer. Cancer in Ukraine 2013-2014, 2014-2015 and 2015-2016. Kyiv, Ukraine Available at http://www.unci.org.ua/, accessed 31-08-2017

<sup>f</sup> Republika of Srpska: Data supplied to CI5 Vol. XI, but not included (http://www.iacr.com.fr/index.php)

<sup>9</sup> Rates (2008-2017), government-controlled area of Cyprus projected to 2022 and applied to the 2022 EUROSTAT projected population for Cyprus <sup>h</sup> Eastern Europe model includes Czechia and Poland (2 registries)

<sup>1</sup> 5-year mortality was used because the number of estimated deaths in 2022 was too small for some sites. The estimated numbers of cases (2015-2019) were then divided by 5. When these were lower than the corresponding numbers recorded by the pathology register in 2013, the recorded age-specific numbers were used

<sup>j</sup> Data source: Nouveaux cas de cancer 2013. Registre morphologique des tumeurs. Laboratoire national de santé. Grand-Duché de Luxembourg, 2015. Available as http://www.lns.public.lu/publications/brochures/RMT\_Nouveaux\_cas\_de\_cancer\_2013.pdf [Accessed 5 January 2017]

<sup>k</sup> Incidence data source: Malignant neoplasms in Montenegro 2013. Podgorica: Insitute of Public Health of Montenegro, Center for Control and Prevention of Non-communicable Diseases, Registry of Malignant Neoplasms of Montenegro, 2018

Projected population 2022 for Serbia (source UN) included Kosovo

<sup>m</sup> Mortality data from WHO excludes Kosovo