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# Cancer registries and pathologists

## *Registros de câncer e patologistas*

Gil P. Pena

Secretaria de Estado da Saúde de Minas Gerais, Belo Horizonte, Minas Gerais, Brazil.

Dear Sir editor,

The American Joint Committee on Cancer (AJCC) Cancer Staging Manual, 8<sup>th</sup> edition, was dedicated to Cancer Registrars, in recognition of their commitment, professionalism, dedication and leadership, related to the recording and maintenance of data that are vital for the care of cancer patients and crucial to cancer research<sup>(1)</sup>. Epidemiological and statistical studies obtained from data catalogued in cancer registries foster the principles of cancer staging, allow the investigation of risk factors and are essential in the evaluation of primary and secondary cancer preventing strategies.

Despite their importance, Cancer Registries have not received due attention from pathologists in Brazil. As pathologists are responsible for diagnosis and classification in most cancer types, their contribution to Cancer Registries cannot be overlooked. Pathology laboratories are a fundamental source of information, essential to the identification of cancer cases.

There are different types of cancer registries. The population-based cancer registries (PBCR) record incident cancer cases within a defined geographic region in a specified period<sup>(2)</sup>. PBCRs have a unique role in providing an unbiased profile of the cancer burden in the population and how it is changing over time. They are essential in planning and evaluating cancer control programmes. They provide the basis for cancer incidence estimates<sup>(3)</sup>. In order to provide accurate population-based cancer estimates, PBCR must have access to patient identity, in order to avoid multiple registries of a case. Special effort is also needed to find information on place of residence, a variable not always available from pathology laboratories<sup>(3)</sup>.

Hospital-based cancer registries (HBCR) have the task of collecting all cancer cases attending that particular institution, with special interest in patient care and treatment results<sup>(2)</sup>. They

represent an incomplete and biased sample of the population. Cancer profile in these registries reflects facilities and expertise within institutions<sup>(3)</sup>.

Another type of cancer registry is the Pathology-based cancer registries, which collect information from one or more laboratories on histologically diagnosed cancers<sup>(3)</sup>.

A major concern among coordinators of cancer registries is related to the access to cancer diagnoses in pathology laboratories. Some services simply deny access to registrars, alleging medical confidentiality. As a result, information available from Brazilian registries may not be representative of the population. The lack of access may also compromise the quality of information, as other medical records frequently do not register precise information on histological classification. For example, a histological diagnosis of invasive ductal breast carcinoma (8500/3) is not infrequently referred to as breast cancer (8000/3) in the hospital medical record, even by mastologists and oncologists.

Notwithstanding difficulties in managing cancer registries, the National Institute of Cancer [Instituto Nacional do Câncer (INCA)] provide data on 1665429 cancer cases diagnosed from 1988 to 2016, collected in 30 population-based cancer registries<sup>(4)</sup>. Overall, microscopically verified diagnoses were reported in 1343962 cases (83.47% of cases with information on basis of diagnosis).

In the period between 2005-2016, coded under International Classification of Diseases (ICD-O) 3<sup>rd</sup> edition<sup>(5)</sup>, 890965 cases are on record. Excluding data from non-melanoma skin cancer (ICD-10 C44), breast cancer (ICD-10 C50) was the most frequent diagnosis, followed by prostate (ICD-10 C61), lung (ICD-10 C34), colon (ICD-10 C18) and stomach (ICD-10 C16) cancers. Even in these commonly reported cancers, easily accessed by biopsy procedures (with the possible exception of lung neoplasms),

precise histological classification was lacking in a significant proportion of cases (**Table**).

Suboptimal histological classification was also observed in 23191 registered lymphoma cases (ICD-O 3 - 959-972 Hodgkin and non-Hodgkin lymphomas), which were classified as malignant lymphoma, not other specified (ICD-O 9590/3) in as many as 15.8% and as malignant non-Hodgkin lymphoma, not other specified (ICD-O 9591/3) in 27%.

Quality improvement of the information requires the commitment and participation of pathologists in cancer registries. As the AJCC has recognized, cancer registries have a fundamental role in cancer care and research. Pathologists should not fail to collaborate in this important task, not only providing access to cancer case diagnosis but also participating in the registry advisory committees.

**TABLE – Morphological diagnosis frequency of selected malignant neoplasms (2005-2016)**

	<i>n</i>	%
<b>C50 – Breast</b>	<b>101192</b>	<b>100</b>
Neoplasm, malignant (8000/3)	9799	9.7
Carcinoma, NOS (8010/3)	6066	6
Adenocarcinoma, NOS (8140/3)	762	0.8
<b>C61 – Prostate</b>	<b>86248</b>	<b>100</b>
Neoplasm, malignant (8000/3)	7899	9.2
Carcinoma, NOS (8010/3)	807	0.9
<b>C34 – Bronchus and lung</b>	<b>39800</b>	<b>100</b>
Neoplasm, malignant (8000/3)	12569	31.6
Carcinoma, NOS (8010/3)	4246	10.7
<b>C18 – Colon</b>	<b>36829</b>	<b>100</b>
Neoplasm, malignant (8000/3)	7727	21
Carcinoma, NOS (8010/3)	525	1.4
<b>C16 – Stomach</b>	<b>33018</b>	<b>100</b>
Neoplasm, malignant (8000/3)	6712	20.3
Carcinoma, NOS (8010/3)	969	2.9

NOS: not otherwise specified.

Source: Instituto Nacional do Câncer<sup>(4)</sup>; Neoplasms classified according to ICD-10<sup>(6)</sup>.

## REFERENCES

1. American Joint Committee on Cancer. AJCC Cancer Staging Manual. In: Amin MB, editor. 8<sup>th</sup> ed. Chicago: American Joint Committee on Cancer/ Springer; 2017.
2. Pena GP. Notes on Brazilian cancer registries. J Registry Manag. 2016; 43(1): 4-5. PubMed PMID: 27382663.
3. Bray F, Znaor A, Cueva P, et al. Planning and developing population-based cancer registration in low- and middle-income settings (IARC

Technical Publications; 43). Lyon: International Agency for Research on Cancer; 2014. Available at: [https://www.iccp-portal.org/sites/default/files/resources/IARC\\_Technical\\_Report\\_No43.pdf](https://www.iccp-portal.org/sites/default/files/resources/IARC_Technical_Report_No43.pdf). [accessed on: Feb 25, 2019].

4. Instituto Nacional do Câncer (INCA). Incidências do BasePop website. Available at: <https://www.inca.gov.br/BasePopIncidencias/Home.action>. [accessed on: Feb 8, 2019].

5. Organização Mundial da Saúde. CID-O – Classificação internacional de doenças para oncologia. São Paulo, Brazil: Edusp; 2005.

6. Organização Mundial da Saúde. CID-10 – Classificação estatística internacional de doenças. Vol 1. São Paulo, Brazil: Edusp; 1997.

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