

# NEW FDA-APPROVED DRUGS FOR BREAST, COLORECTAL, PROSTATE AND LUNG CANCER, AND BRAZILIAN HORIZON SCANNING OPPORTUNITY



**TATIANE BOMFIM RIBEIRO<sup>1</sup>, ADALTON GUIMARÃES RIBEIRO<sup>2</sup>, MOACYR R. CUCE NOBRE<sup>1 3</sup>**

<sup>1</sup>Departamento de Medicina Preventiva, Faculdade de Medicina da Universidade de São Paulo - Brazil, <sup>2</sup>Secretaria Estadual de Saúde - São Paulo - Brazil, <sup>3</sup>Instituto do Coração (InCor) do Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo - Brazil

**Cancer caused 9.5million deaths in 2018**



The most common cancer types diagnosed worldwide are lung, breast, colorectal, and prostate cancer.

The global expenditure on anticancer drugs and supportive care exceeded US\$ 130 billion



Is the 1<sup>st</sup> to new drug approval (70%)

FDA assessment for **Horizon Scanning** in Latin America



to identify and monitor new and emerging health technologies

## OBJECTIVE

This study aimed to analyze the new molecular entity (NME) approved by FDA for lung, breast, prostate, and colorectal cancer from 2016 to 2018. Brazilian National Health Surveillance Agency (ANVISA) registration was assessed in order to provide Horizon Scanning (HS) candidates.

## METHODS

Data were collected on the FDA online database, Drugs@FDA, for NME approved. Approval date, generic name, biomarker, and FDA special designation for shorter approval were assessed. Regarding those NME, ANVISA registry was checked on February 18th, 2019.

## RESULTS

**EIGHT NEW MOLECULAR ENTITY APPROVED BY THE FDA**

Four (50%) for breast cancer, three (37.5%) for lung cancer, one (12.5%) for prostate, and none for colorectal.



87.5% used an FDA special designation to fasten review



87.5% used a biomarker (i.e., HER-2, HR, ALK, gBRCAm, EGFR)

Ribociclib and apalutamide; the differences on approval time between FDA and ANVISA were respectively 16 and 9 months.

**Horizon Scanning**



talazoparib, abemaciclib, neratinib, lorlatinib, dacomitinib and brigatinib

## CONCLUSION

Biomarker and fast review pathway accounted for 87.5% of the FDA approvals. Six drugs can be used for potential HS in Brazil.