Cancer Drug Development in a Global Setting

Regulatory Perspective

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Disclosures

- I have no financial conflicts of interest.
- This presentation represents the views of the speaker and should not be construed to represent FDA's views or policies.

Outline

- **Oncology Center of Excellence (OCE)**
  - **Mission:** Achieve patient-centered regulatory decision-making through innovation and collaboration
- **Collaboration:** Project Orbis
- **Innovation:** Real-Time Oncology Review (RTOR) and other Regulatory Efforts
- **Patient-Centered Projects**
- **Conclusion**

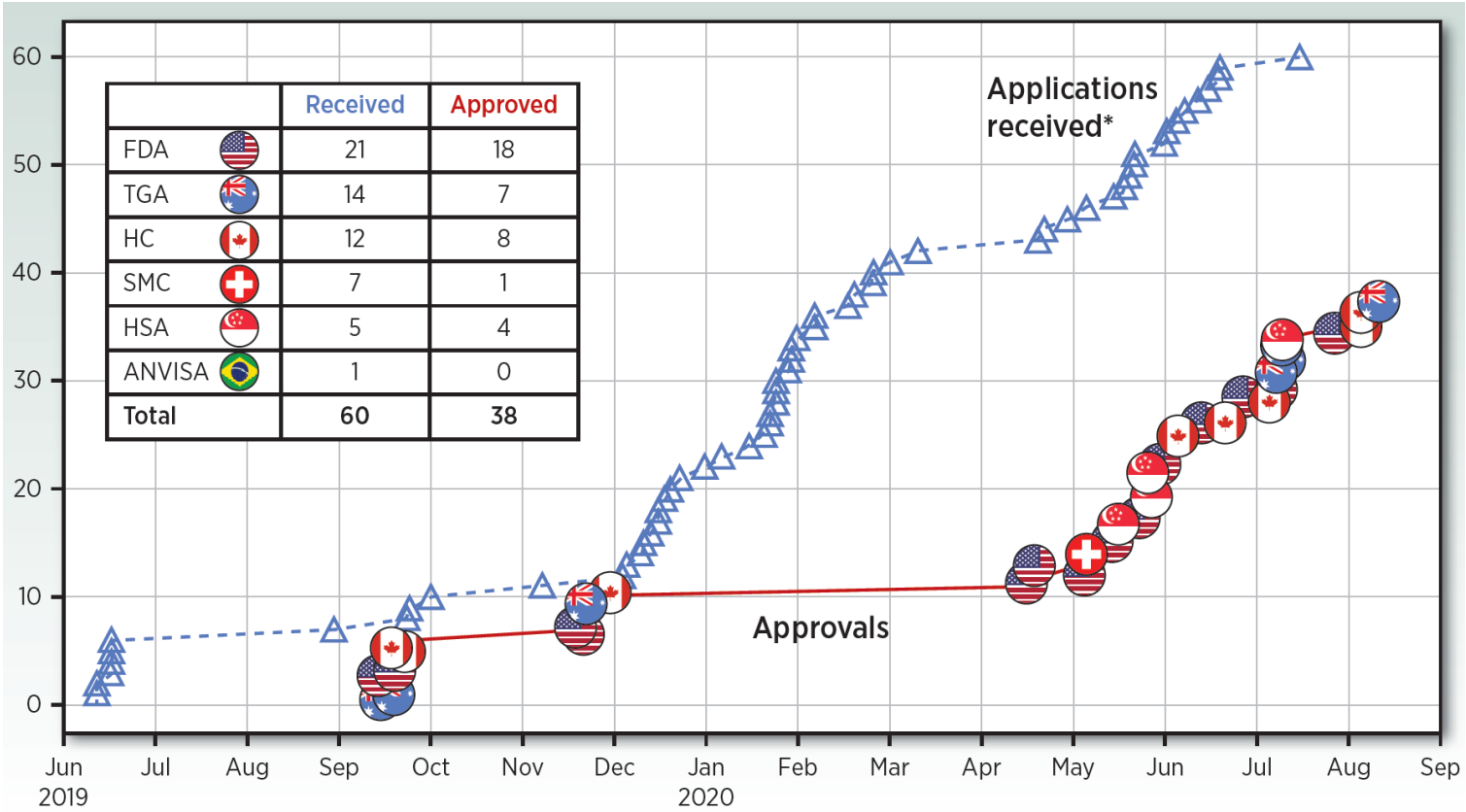
FDA Oncology Global Collaboration

- Began in October 2004 with European Medicines Agency (EMA)
- **Expanded Oncology Cluster to other Regulatory Authorities:**
  - January 2010: Health Canada (HC)
  - January 2014: Pharmaceuticals and Medical Devices Agency (PMDA)
  - July 2014: Therapeutic Goods Administration (TGA)
  - July 2016: Swissmedic (SMC)
- **Project Orbis:** Collaborative Review Program
  - Launched in May 2019
  - Current participating countries (Project Orbis Partners): Australia, Brazil, Canada, Singapore, Switzerland, United Kingdom

Project Orbis Overview

- **Criteria:** high-impact, clinically significant applications, should generally qualify for priority review (US)
- **Application Selection Process**: FDA serves as primary coordinator. Plan for concurrent or near-concurrent submissions across participating countries
  - **Assessment Aid:** primary review document for FDA and core reference document for Orbis countries
- **Review:** multi-country teleconferences (3-5 per application)
  - each country retains full independence in regulatory decision and labeling negotiations

Project Orbis 1-Year Update



	Received	Approved
FDA	21	18
TGA	14	7
HC	12	8
SMC	7	1
HSA	5	4
ANVISA	1	0
Total	**60**	**38**

Additional Highlights:

1. Application type: NME (28%), supplements (72%)
2. Integration with other FDA and OCE programs: BTD (62%), RTOR (71%)
3. Median time gap for submission: 0.6 m (range -0.8 to 9.0m)
4. Median time gap for approval: 1.1m (range 0.0 to 3.8m)

Reference: de Claro RA et al. *Clin Cancer Res.* 2020 Dec 15;26(24):6412-6416.

*Initial set of Orbis applications based on 21 FDA applications received from 12 Jun 2019 to 12 Jun 2020.

Real-Time Oncology Review (RTOR)

- **Description**
  - pilot program launched in Feb 2018 to facilitate earlier submission of datasets to support earlier start to FDA application review
- **Selection Criteria**
  - applications likely to demonstrate improvements over available therapy
  - includes breakthrough therapy and priority review designations
- **Process**
  - Sponsor or FDA initiates discussion for RTOR submission upon availability of topline results from pivotal trial(s)
  - negotiation of submission plan and timing

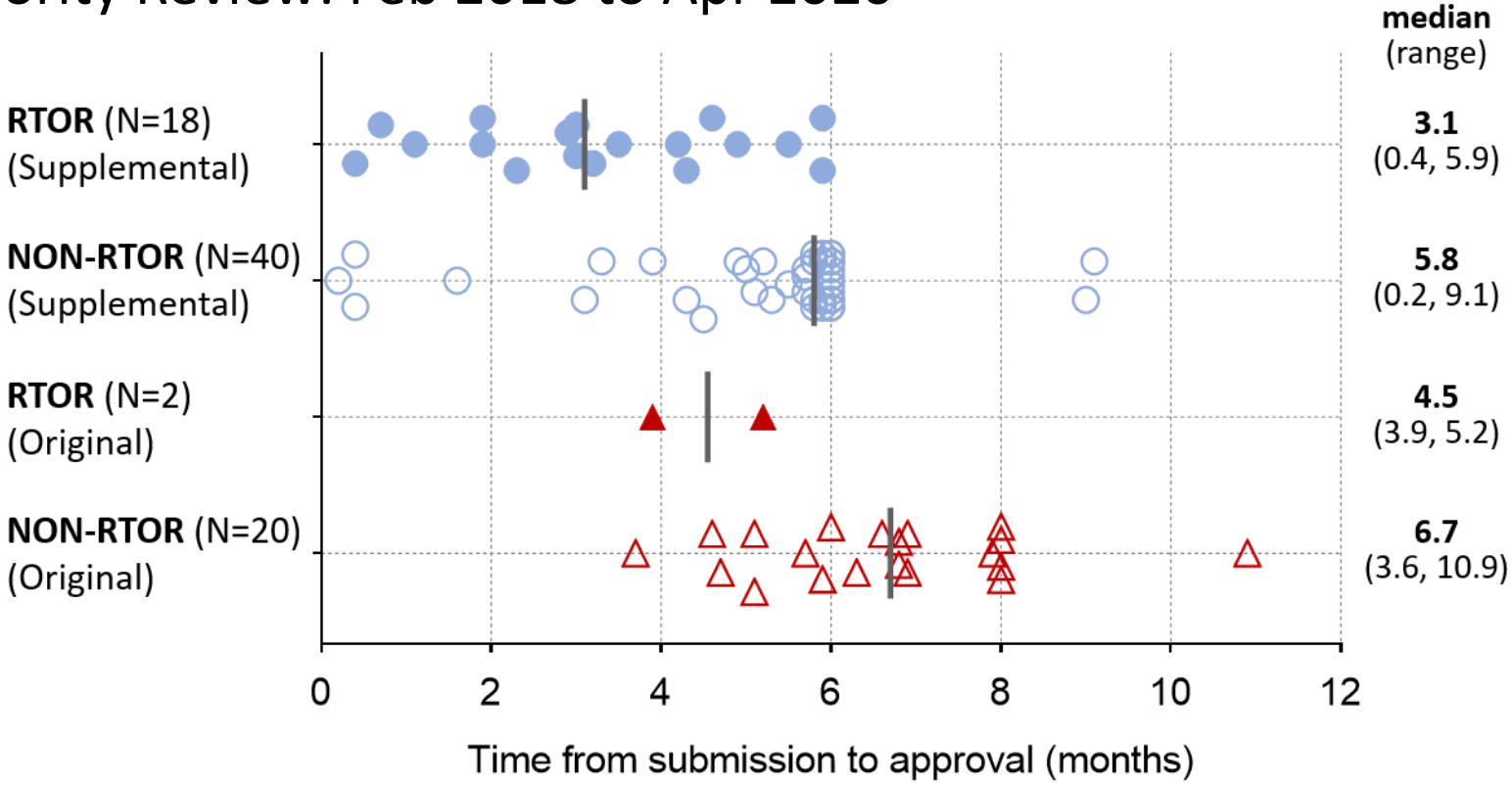
RTOR 2-year OCE Experience

- **Application Scope** (20 approvals from February 2018 to April 2020)
  - solid tumor and hematologic malignancy indications
  - efficacy supplements (N=18) and new molecular entities (N=2)
  - small molecule (NDA) and biologics (BLA) applications
  - randomized trials (N=16), single-arm trials (N=4)
- **RTOR submission plan**
  - Median RTOR lead time: 5.7 weeks (range 1.7 to 16.2)
  - Median number of RTOR submission bundles: 2 (range 1 to 7)
  - **Assessment aid** used in 85% of applications
- **Approval Times**
  - Median time-to-approval from submission: 3.3 months (range 0.4 to 5.9)

Reference: de Claro RA et al, Clinical Cancer Res. 2021 Jan 1;27(1):11-14.

OCE RTOR and Non-RTOR Applications

Priority Review: Feb 2018 to Apr 2020



Reference: de Claro RA et al, Clinical Cancer Res. 2021 Jan 1;27(1):11-14.

FDA Guidances on Eligibility Criteria in Cancer Clinical Trials

- Patients with HIV, Hepatitis B Virus, or Hepatitis C Virus Infections (July 2020, Final)
- Patients with Organ Dysfunction or Prior or Concurrent Malignancies (July 2020, Final)
- Brain Metastases (July 2020, Final)
- Minimum Age Considerations for Inclusion of Pediatric Patients (July 2020, Final)
- Inclusion of Older Adults in Cancer Clinical Trials (March 2020, Draft)

Patient Centered Efforts

- **Project Community:** initiative to introduce the work of FDA oncology to people in the community, especially under-represented and underserved communities
  - Dialogue with HIV and Oncology Communities (January 7, 2020)
  - OCE Black History Month, All Power to the Patient, Achieving Cancer Health Equity (February 6, 2020)
  - LGBTQ + OCE = A Voice in Clinical Trials and Cancer Drug Development (June 23, 2020)
  - Living with Cancer While Black, Clinical Trial Barriers (July 29, 2020)
  - Latino Community: Achieving Equity in Cancer Clinical Trials (September 24, 2020)
  - Building Connections Toward Native American Clinical Trial Participation (October 22, 2020)

Patient Centered Efforts

Project Facilitate: single point of contact call center for oncology expanded access

Conclusions

- Even during the COVID19 pandemic, FDA Oncology Center of Excellence (OCE) continues to work on multiple initiatives consistent with its mission.
  - **Collaboration:** Project Orbis
  - **Innovation:** Real-Time Oncology Review and Eligibility Criteria Guidances
  - **Patient-Centered Efforts:** Project Community and Project Facilitate
  - and many more…