FICAN science webinar series

Wednesday 25.9.2024 at 15-16

Advancing cancer care with real-world data

This time the weminar is organized by FICAN South. The seminar will be held online (Microsoft Teams) and is open to everyone interested in cancer research.

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(meeting ID 324 933 596 084, passcode: N6ohs6)



Speaker

Kuva: Helsingin yliopisto



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Get to know the Speaker: <u>Kimmo Porkka – University of</u> <u>Helsinki Research Portal</u>

Abstract

Close to real-time sharing of medical information is increasingly important, from managing societal emergencies (e.g. COVID-19 pandemic, cancer drug shortages) to generating reliable and transparent evidence for regulatory and research purposes. However, with the recent focus on privacy preservation and related legislation (e.g. GDPR, EHDS), exchange of primary patient-level data has become increasingly challenging and novel methods and structures for rapid sharing and analyzing medical information are urgently needed.

Due to unmet need for new cancer therapies, many new oncology drug regulatory approvals are based on limited experimental trial data, and less commonly are truly practice-changing. Clinical data networks hold promise for more comprehensive, transparent and reliable evidence generation (real-world data => real-world evidence) for assessing the true value and benefit of cancer drugs in clinical care, particularly in the post-licensing setting.

Networks conforming to a common clinical data model (e.g. OMOP) enable privacy-preserving federated or swarm learning -based data analytics and exceptionally large network studies, without the need of exchanging sensitive patient-level data. It provides a secure, scalable and robust solution for rapid national and global sharing of oncology data, aiding in implementation of true value-based cancer care.

Relevant references for this talk

- Reich, C. et al. OHDSI Standardized Vocabularies—a large-scale centralized reference ontology for international data harmonization. J. Am. Med. Inform. Assoc. ocad247 (2024) doi:10.1093/jamia/ocad247.
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- Lawlor, A. et al. PIONEER big data platform for prostate cancer: lessons for advancing future real-world evidence research. Nat. Rev. Urol. 1–9 (2024) doi:10.1038/s41585-024-00925-4.
- Schultze, J. L., Büttner, M. & Becker, M. Swarm immunology: harnessing blockchain technology and artificial intelligence in human immunology. Nat Rev Immunol 22, 401–403 (2022).

