Infographic

Ten Strides Forward in Cancer

IQVIA's commitment to cancer care and innovation

IQVIA is passionate about a data driven approach to inform patient care and outcomes. This World Cancer Day, a team of real-world experts highlight 10 key facts spanning real world evidence generation in oncology and its benefits to patients.

FACT 1 Precision medicine

134 unique new cancer medicines have launched in the USA in the past 10 years[1]

- **Nearly half (43%)** of anti-cancer drugs approved by the FDA from 1998 to 2021 were precision therapies, that use an individual's genetic profile or other characteristics to inform their treatment[2]
- **Real-world evidence** plays an important role in precision medicine across the entire drug lifecycle to accelerate access to these innovative treatments

FIND OUT MORE

FACT 2 Highlighting barriers

Radioligand therapy (RLT) is a novel targeted radiation delivery method, that limits unwanted effects on healthy cells.

RLT has proven benefits in treating gastroentero-pancreatic, neuroendocrine tumours and advanced prostate cancer and >140 clinical trials in different tumour types[3]

Delivering RLT requires system level changes across **5 major levers:**

- Diagnostic capacity
- Patient referral processes
- Number of RLT centres/beds
- Regulatory and patient release frameworks
- Skilled workforce

FIND OUT MORE

FACT 3 Addressing health inequalities

- Within the UK, disparities in cancer care result in up to a **70% higher mortality rate** in deprived areas[4]
- By integrating patient insights and collaborating with cross-sectional stakeholders, IQVIA aims to help transform healthcare systems for equitable, effective cancer care, ensuring every patient has access to optimal treatment

FIND OUT MORE

FACT 4 Powering HTA submissions

- There was **>6-fold increase in HTA submissions**, from 6% in 2011 to 39% in 2021 observed in 83 HTA bodies in 33 countries[5]
- There are **>20 examples across Canada, Sweden, UK, France, Germany**, where RWE has had a positive impact on the HTA recommendation in oncology from 2011 to 2021[5]

FIND OUT MORE

RWE has had a positive impact on HTA recommendations

Complementing clinical trials

Single-arm trials help accelerate the availability of innovative therapies

FACT 5

- **Real-world evidence (RWE) is increasingly important** for external comparator arms to these studies facilitating regulatory approval and market access[6]
- Over the last 5 years, Health Technology Assessment (HTA) submissions for oncology treatments based on single arm **trials globally increased from 10% to 16%** with up to 50% using RWE for comparative purposes[7]
- 17% of European Medicines Agency (EMA) approvals in oncology between 2016 and 2021 contained external control arms[8]

FIND OUT MORE

FACT 6 Molecular testing insights

England's Cancer Analysis System (CAS) has national data coverage of people diagnosed with cancer[9]

- CAS now includes CAS molecular testing data which has **data on over 430 biomarkers** including nationally representative data for PDL1 protein biomarker and MMR gene mutations used to help determine the right treatment for multiple tumour types
- IQVIA invested early in pilots using CAS Molecular Diagnostics (MDx) presented at ISPOR to demonstrate CAS MDx's role in informing innovation and patient care[10]

FIND OUT MORE

Synthetic data

FACT 7

- IQVIA has run **>50 studies leveraging Simulacrum**, a synthetic dataset based on England's national registry, the Cancer Analysis System
- IQVIA supported development of this synthetic dataset which contains, artificial patient-like cancer data, to **accelerate analysis on the actual patient data whilst protecting patient privacy**

FIND OUT MORE

IQVIA is using AI techniques such as Unsupervised Machine Learning (UML) to deliver new insights into cancer treatment

FACT 8 AI-driven insights

- Patient populations with distinct treatment patterns can be identified using UML, further analysis can then be performed to explore demographics, histologies, treatment regimens, and survival probabilities
- UML relies less on preconceived notions about treatment patterns as it identifies them directly from the real-world data. This results in **a new data-driven view of patient treatment pathways and associated outcomes**

FIND OUT MORE

OMOP in cancer

FACT 9

DIGICORE is a public-private partnership, **pan-European research network of 40 centres**[11] partnering with IQVIA to accelerate implementation of precision oncology in Europe

- **16 hospitals in 13 countries** contributed to the clinical consensus of a target dataset to help identify and address variations in care with fewer than 40 concepts, named MEDOC (minimal essential description of Cancer)[12]
- MEDOC covers key demographic, clinical phenotype, biomarker, treatment and pragmatic outcomes mapped to OMOP (an open-source common data model)[13]

FIND OUT MORE

Prostate cancer is the most common cancer type in males, with ~52,300 new cases diagnosed each year[14]

Building new sources

FACT 10

- IQVIA and **Prostate Cancer Research (PCR)** are seeking to bring patient voice, need and experience into clinical research to support patient directed end-to-end drug delivery
- IQVIA is actively collaborating with PCR to provide clinical and patient-reported data to enable accelerated medicines development and improved health outcomes for people with prostate cancer

FIND OUT MORE

IQVIA is passionate about a data driven approach to inform patient care and outcomes

Conclusion

We have highlighted just 10 of the many exciting, innovative advancements and some of the challenges in cancer care and research. IQVIA's teams are playing a key role in all of them. Real-world evidence is integral to informing all stages of cancer care from identifying targets of interest to complementing clinical trials, ensuring equity of access and bringing the patient voice into end-to-end drug delivery. IQVIA is a leading provider of real-world evidence and remains committed to providing a data-driven approach to accelerate healthcare.

February 2024

CONTACT US
X: @IQVIA_UK
LinkedIn: IQVIA UK & Ireland
iqvia.com

References

1. https://www.iqvia.com/insights/the-iqvia-institute/reports-and-publications/reports/global-oncology-trends-2023
2. Quantifying the Expanding Landscape of Clinical Actionability for Patients with Cancer | Cancer Discovery | American Association for Cancer Research (aacrjournals.org)
3. https://www.clinicaltrials.gov
4. https://www.thelancet.com/pdfs/journals/lanonc/PIIS1470-2045(23)00530-2.pdf
5. https://www.iqvia.com/insights/the-iqvia-institute/reports-and-publications/reports/impact-of-rwe-on-hta-decision-making
6. https://www.cancertherapyadvisor.com/home/cancer-topics/general-oncology/role-single-arm-trials-oncology-drug-approvals/
7. IQVIA Market Access Insights extract 08-Jan-2024 https://www.iqvia.com/library/fact-sheets/market-access-insights
8. Wang, X. et al (2023), Current perspectives for external control arms in oncology clinical trials: Analysis of EMA approvals 2016-2021, Journal of Cancer Policy,, 35: https://doi.org/10.1016/j.jcpo.2023.100403
9. https://academic.oup.com/ije/article/49/1/16/5476570
10. https://www.ispor.org/docs/default-source/euro2023/hagenaars-et-alispor-poster-rwd54vfinal131140-pdf.pdf?sfvrsn=626b54c8_0
11. https://digicore-cancer.eu/Default.aspx
12. https://digicore-cancer.unige.net/Allegati/DIGIONE_Press_release_22_12.pdf
13. https://www.ohdsi.org/data-standardization/
14. https://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/prostate-cancer#heading-Zero