Israel's Clinical Trials 2016–2025: A Multi-Source Evaluation of MyTrial for Policy-Relevant Decision Making

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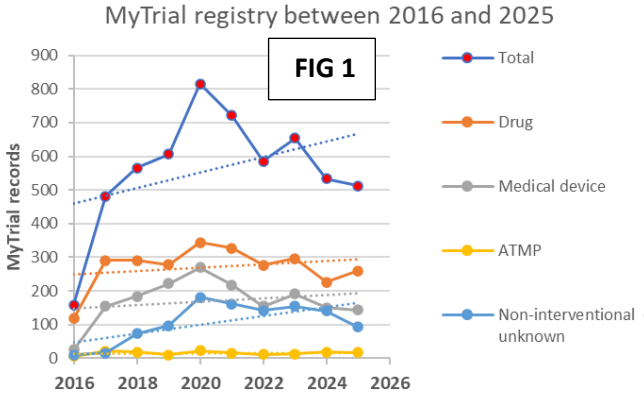
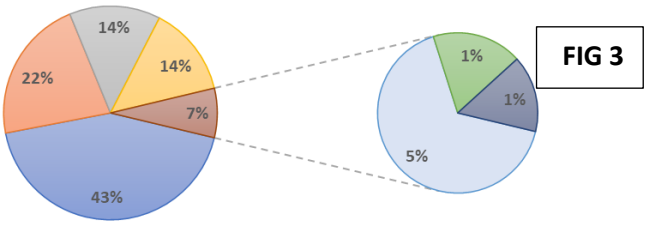
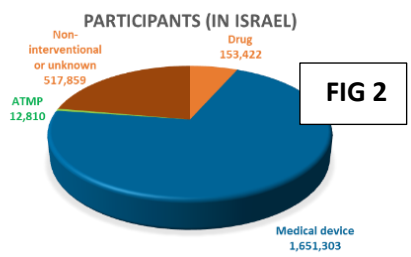
Background Clinical trial registration is a foundational element of research transparency, participant protection, and reproducibility. Following the 2004 International Committee of Medical Journal Editors (ICMJE) mandate and the revised Declaration of Helsinki, registration before first participant enrolment became a global standard. Israel established the MyTrial registry (mytrial.gov.il) in 2015 under the Ministry of Health (MOH), with mandatory registration for Helsinki Committee ethical approval introduced in 2016. The registry has since grown to encompass nearly 6,000 records, spanning all major medical disciplines, sponsor types, and geographic regions.

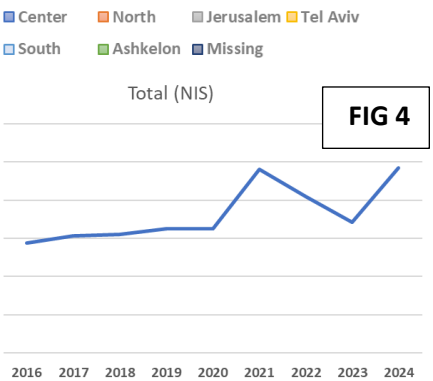
The objectives of this study were to: (1) characterize all MyTrial registrations from 2016 to 2025 by type, sponsor, phase, domain, and geography; (2) quantify participant exposure by trial category; (3) analyze international pharmaceutical company engagement; (4) cross-reference trial activity with MOH financial procurement data; (5) perform sub-domain analysis within leading medical specialties; (6) identify temporal trends using inferential statistics; and (7) derive policy recommendations.

RESULTS As shown in **FIG1**, annual trial numbers increased from 159 in 2016 to a peak of 816 in 2020, then remained high through 2025. The 2020, 2021 peaks reflect COVID-19–related trial registrations (particularly Phase IV and non-interventional designs) as well as the accumulation of previously unregistered legacy studies. Although most studies are classified as drug trials, the largest recruitment of participants is done for medical device trials (**FIG2**). Most research is conducted in the central region with 57% of the trials (**FIG3**). During the coronavirus pandemic, we can see an increase in investment in research. This trend changed with the outbreak of war in 2023, and changed again in 2024 (**FIG4**).









DISCUSSION Multi-source analysis of Israel's MyTrial registry from 2016 to 2025 provides unprecedented depth into the national clinical trial ecosystem. With nearly 6,000 registered trials, 2.33 million Israeli participant registrations, and 7.5 billion NIS pharmaceutical investment, Israel's clinical research sector has grown in volume, sophistication, and economic significance. Oncology dominates across all metrics; advanced therapy trials are growing fast; geographic concentration in central institutions remains the principal equity challenge; and pharma trial sponsorship aligns closely with financial contributions.