AI in Clinical Trials, Moving from Pilot to Scale and the Trust Gap That Still Holds It Back

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Dear Clients,

We would like to share a key operational insight emerging from the clinical trials market. Artificial Intelligence (AI) is rapidly entering the clinical trial workflow, from protocol planning and feasibility through site operations and patient recruitment. However, a central barrier to adoption is not the technology itself, but organizational trust in AI outputs.

This theme was highlighted at Arena International's Outsourcing in Clinical Trials (OCT) DACH 2025 conference, held in Zurich, Switzerland, in November 2025. Industry participants emphasized that implementing AI must be carefully designed and embedded within real workflows, particularly when moving from early adopter pilots to broad enterprise use. At the same time, the market continues to face major recruitment challenges. Conference discussions referenced that approximately 80% of trials fail to meet their initial enrollment targets, which helps explain the urgency behind the push for operational efficiency.

What is driving the trust gap

A recurring message from the conference was that AI adoption tends to be smoother during pilots involving small groups that are enthusiastic and more forgiving. The challenge begins when AI tools are rolled out to later adopters across the organization, where skepticism and lower adoption rates are common. As a result, change management is becoming a core requirement, not a nice to have. It may include enterprise training, clear guidance on

appropriate use cases, and governance mechanisms that make outputs more explainable and auditable.

Practical implications for Israeli pharma, medtech and biotech

Israel's life sciences ecosystem is well positioned to benefit from this shift, and to contribute to it, given its strengths in data infrastructure and algorithmic capabilities. Translating this into business impact, we see three practical focus areas that are particularly relevant for Israeli companies and investors.

First, data quality and integration. Even strong models will underperform when clinical and operational data is fragmented across hospitals, trial sites, laboratories, and remote monitoring providers. Solutions that prioritize interoperability, data quality controls, and auditability are more likely to earn trust from sponsors and to scale across multiple studies and sites.

Second, adoption and change management as part of the product. Trust is built when users can understand how tools fit into day-to-day work and when success metrics are clear. Companies that design implementation playbooks, training, and measurable operational outcomes into their offering may differentiate themselves from solutions that remain at the proof-of-concept stage.

Third, commercial structures tied to outcomes. If AI can materially improve recruitment, reduce protocol deviations, or shorten timelines, pricing and contracting may increasingly reflect business outcomes rather than generic software licensing. This can open the door to performance-based structures between sponsors, technology providers, and Contract Research Organizations (CROs).

Looking ahead

While AI is gaining momentum in clinical trials, the pace and scope of adoption may vary across organizations and use cases. One factor that is repeatedly highlighted is the need for a practical, measurable trust framework. Such a framework may include transparency,

governance, workflow integration, and the ability to explain, review, and reproduce AI assisted decisions in a way that stakeholders can rely on.

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As always, the team at Agmon with Tulchinsky remains at your disposal.

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