

Generic research tools: new paths towards accelerating patient impact for implantable devices

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Abstract

Decades of research and development in implantable devices have led to remarkable options for patient treatment and intervention. Key healthcare areas such as neurological, metabolic and cardiovascular disorders are so far only partially benefiting from these advances despite some significant, but limited high profile successes (pacemakers, cortical implants, Cochlea implants, DBS, Glucose sensors). Conventional paths towards translation, commercialization and clinical impact suffer from high risk and almost prohibitive cost. They often ignore critical system level engineering considerations and the opportunities of coupling drug and device based approaches. They also ignore alternative paths e.g. through clinical and basic research markets that facilitate technology maturation and financial and regulatory de-risking of clinical opportunities. The talk will highlight key challenges and identify potential alternative routes to impacting patients.