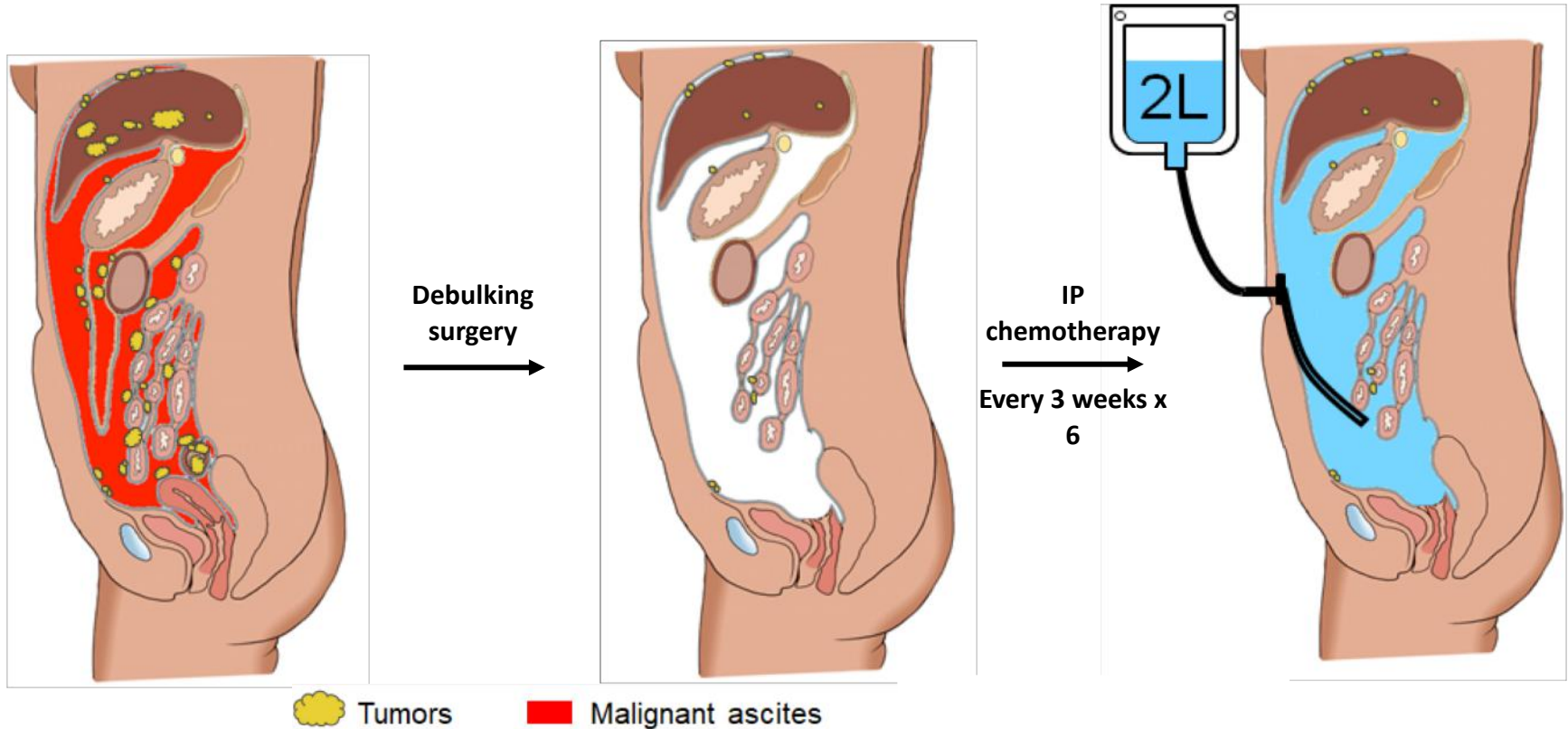


Implants for cost-effective and accessible intraperitoneal chemotherapy

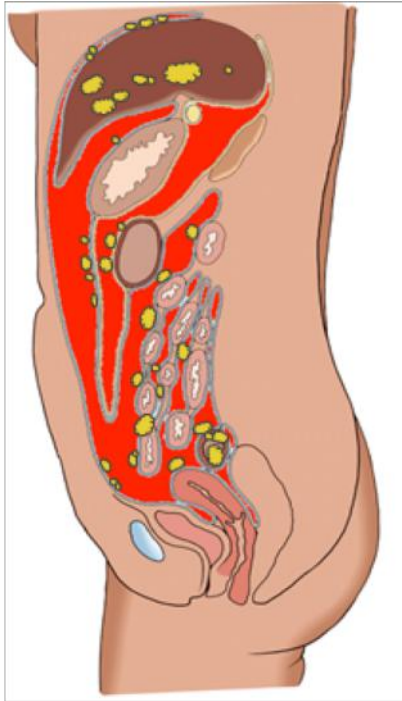
Kriti Subramanyam

PI: Michael J. Cima
MIT Tata Center for Technology and Design

>2 million patients suffer from gynecologic and gastrointestinal cancers every year in LMICs



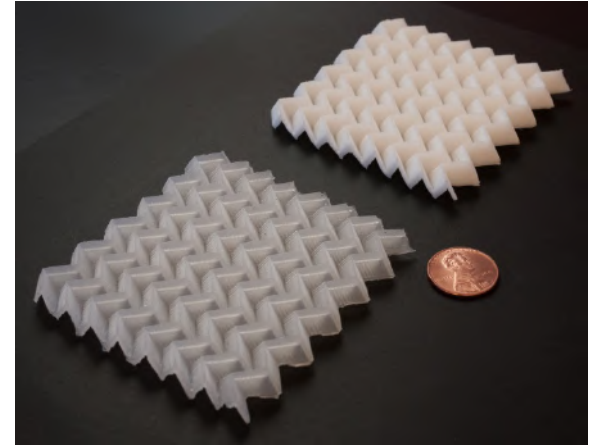
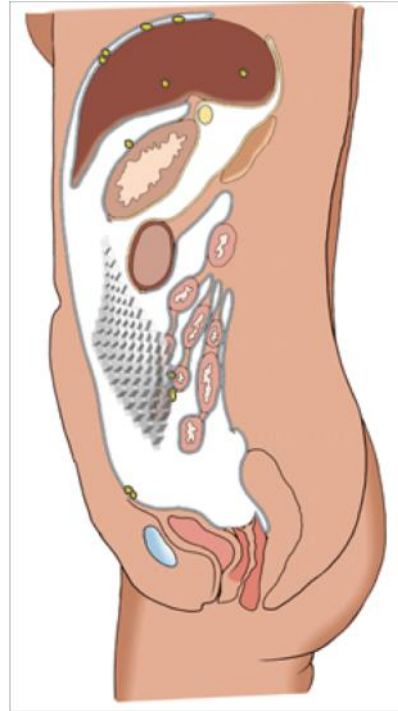
Our approach: an IP drug-eluting implant that replaces current IP chemotherapy infusions



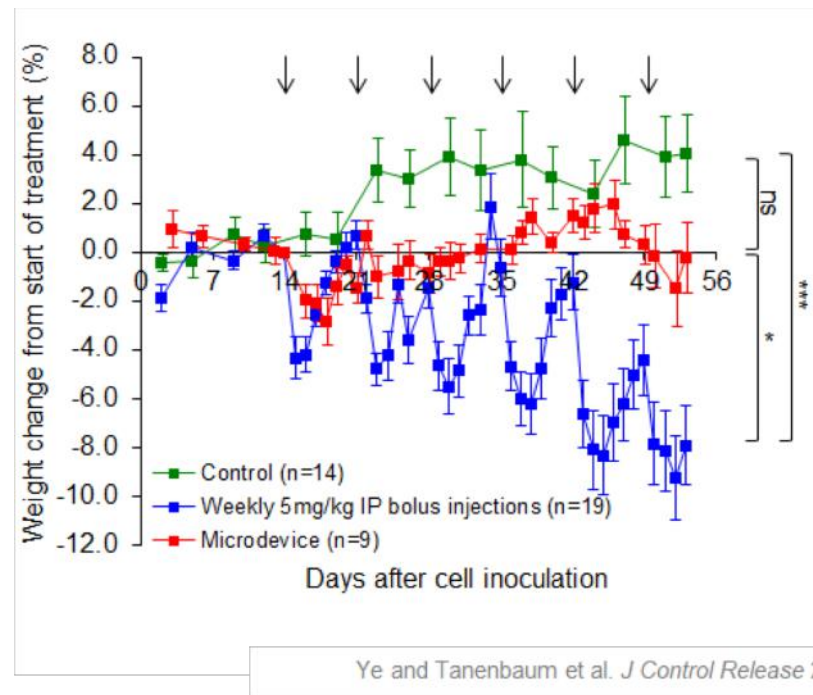
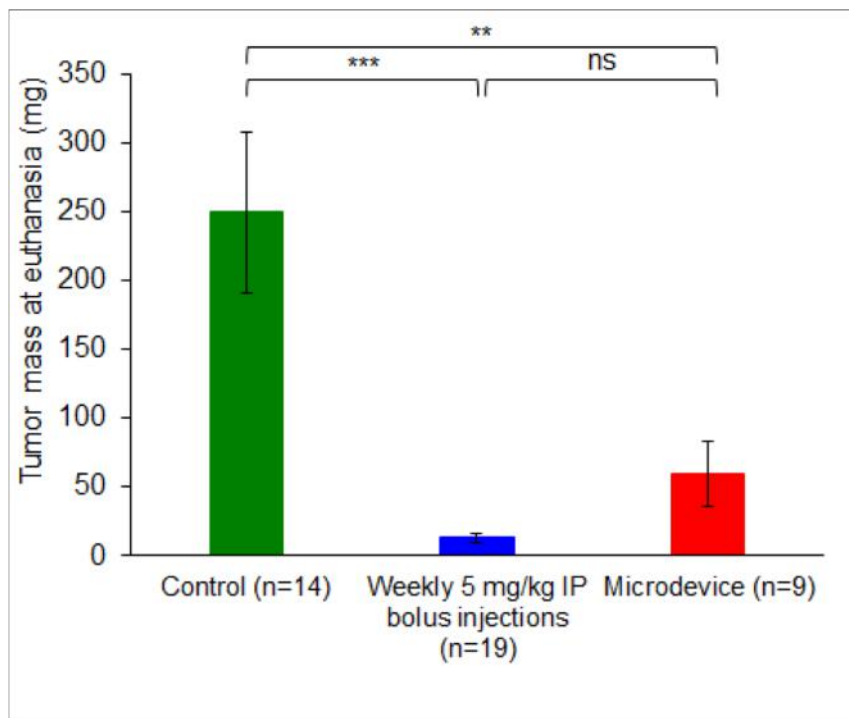
Tumor
removal
surgery



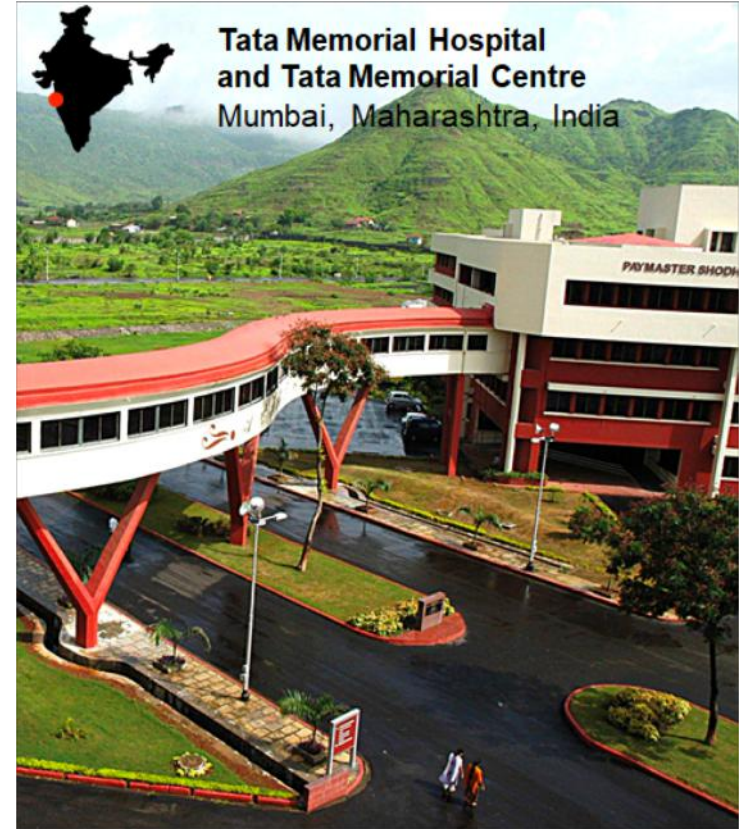
Implant



Continuous low-dose cisplatin can be **as effective as** weekly IP high-dose injections and **less toxic** in treating ovarian tumors in mice

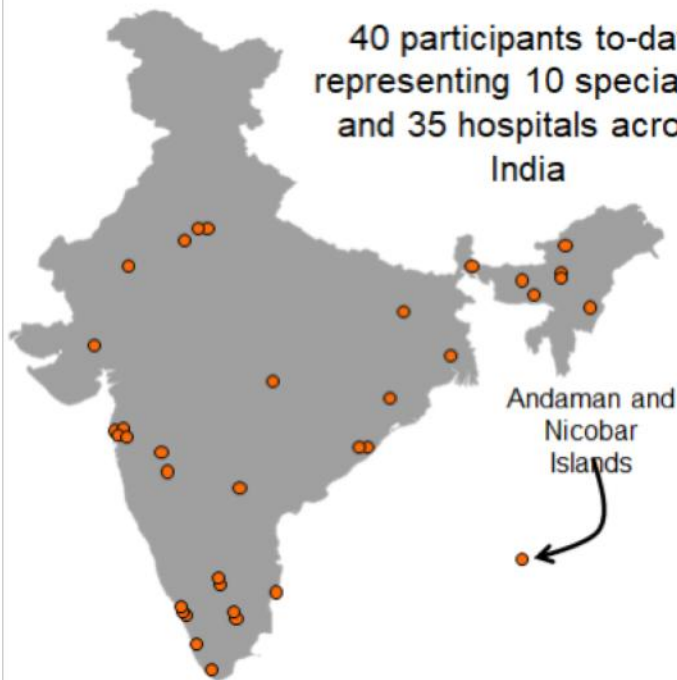


How will our drug-eluting implant integrate into gynecologic and gastrointestinal cancer care in India?

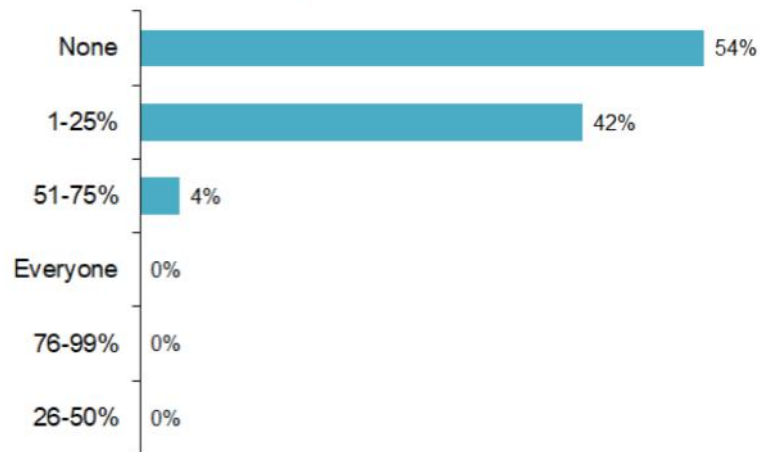


We surveyed clinicians across India to understand the state of peritoneal metastasis management

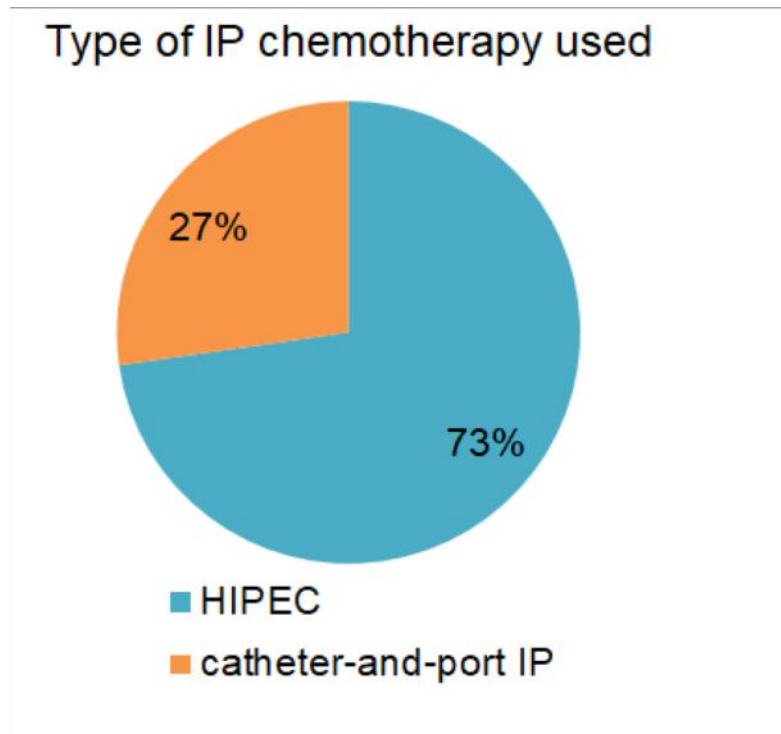
40 participants to-date
representing 10 specialties
and 35 hospitals across
India



What percentage of your peritoneal metastasis patients receive any kind of IP chemotherapy?



Survey results reveal increased use of novel IP approaches and eagerness of physicians to adopt new technologies



Clinicians surveyed:

- Would replace catheter-and-port IP chemotherapy with our implant
- Favor integrating our implant into existing HIPEC regimens to perform follow-up treatment

	HIPEC	PIPAC	Our Implant
Surgeon-controlled delivery?	X	X	X
Use for cancer treatment?	X		X
Use for palliative care?		X	X
Performed without specialized hospital equipment			X
Duration of chemotherapy exposure	Hours	Hours	Months
Cost	~ \$20K-40K/procedure	~\$2K/cycle	~2-4K/implant

Thank you



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KOCH INSTITUTE
For Integrative Cancer Research at MIT