



DEC Healthcare

Enabling our Partners in Highly Potent API Delivery

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Make.
Make Perfect.
Repeat.

Old Dogs

- Amazing small molecule APIs
 - Pain relief
 - Cancer therapy
 - Antibiotics
 - Hormone therapy
 - etc.
- Oral tablet/injected bolus; mins to hours
- If APIs were dogs, these pets could only w
- CRS
 - Extending release profile, to control drug concentrations in the body
- Challenge
 - Can you teach old dogs new tricks?

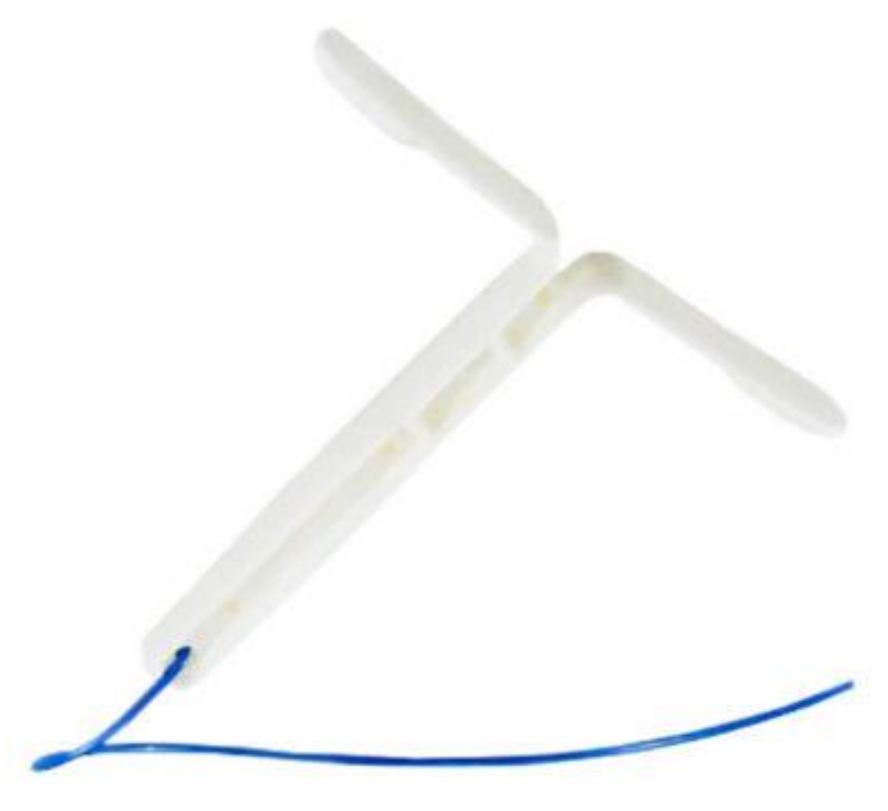


Jack

Small
Molecule
API

Polymeric drug delivery devices

- APIs and polymers/excipients compounded to form composites
- Moulded or extruded into devices
- Opportunities
 - Low cost
 - Highly scalable
 - Small molecule APIs



R&D Manufacture

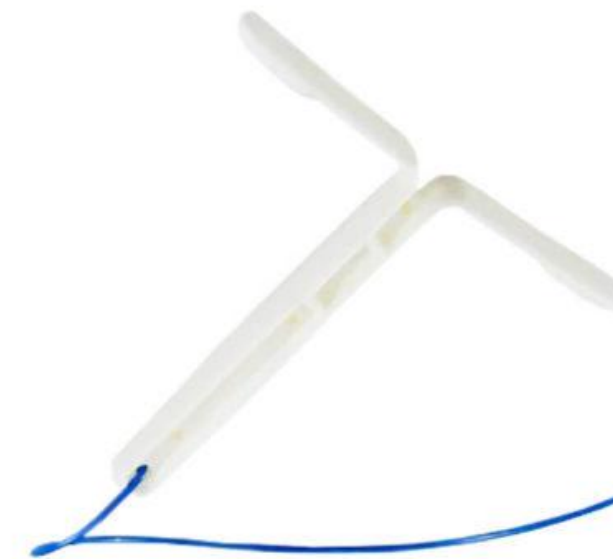
Raw Materials



Processing



Product



GMP Manufacture

Batch Records



Raw Materials



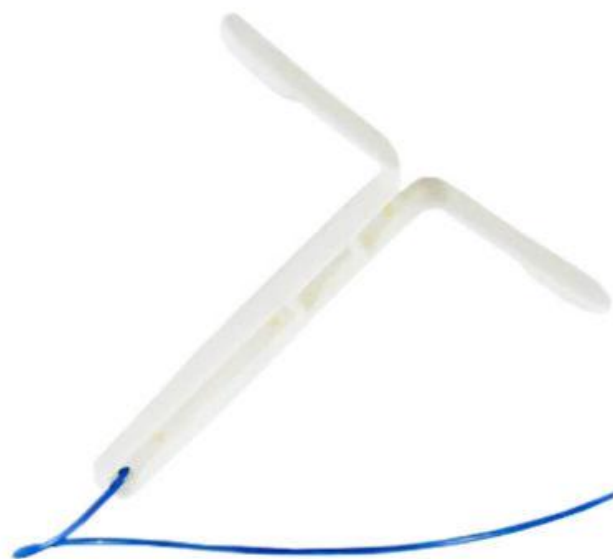
Raw Materials QC

Processing



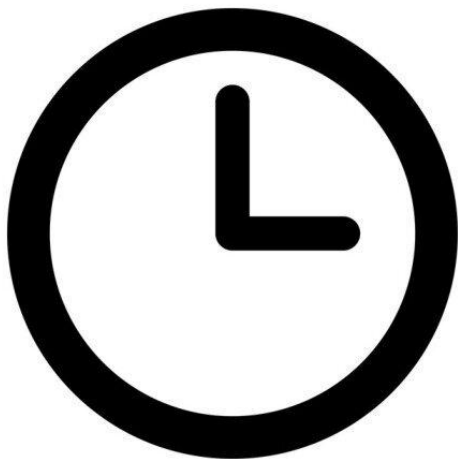
In-Process QC

Product



Product QC

Stability



Stability QC

GMP Prepared

Development; Quality by Design

Qualification and Validation

GMP Compliant Manufacture

Batch Records



Raw Materials



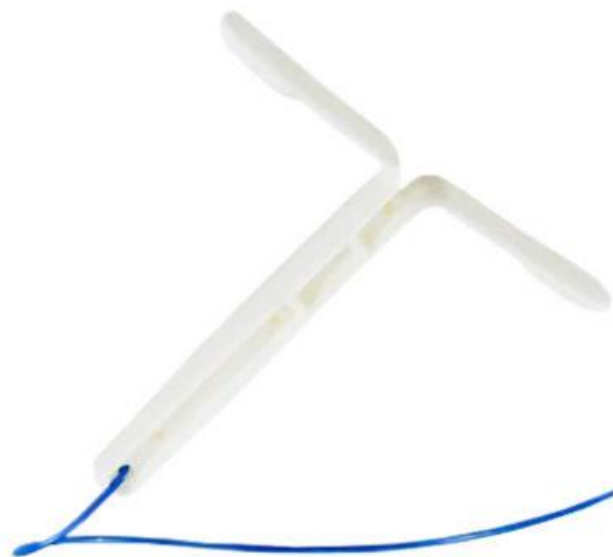
Raw Materials QC

Processing



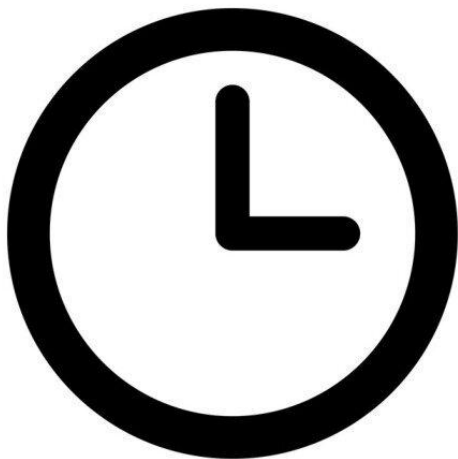
In-Process QC

Product



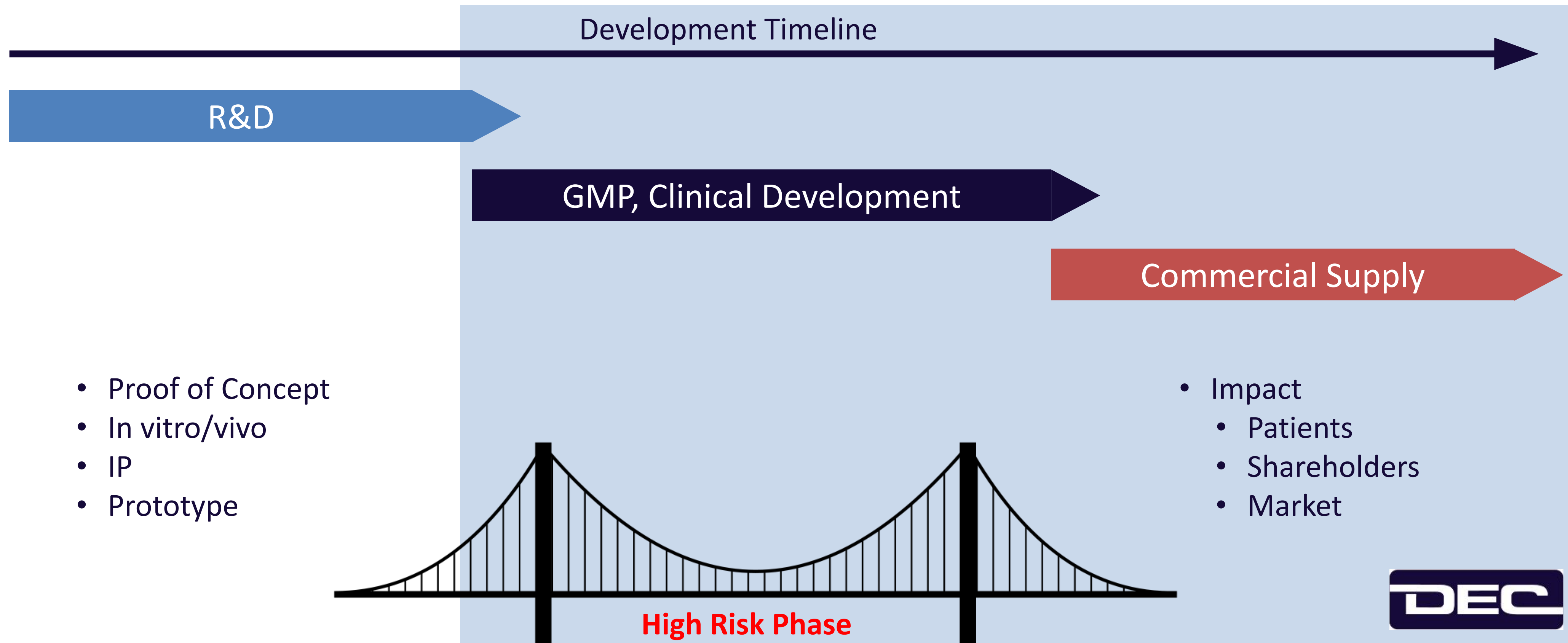
Product QC

Stability



Stability QC

Enabling





Why DEC?



**Make.
Make Perfect.
Repeat.**

1. End-to-End Support

Product Development

- Prototyping
- Design for Manufacture
- Tooling

Quality

- Protocols/SOPs
- Qualification
- Validation
- Manufacturing Batch Record



Your Product

Analytical Development

- Method development
- Raw material measurement
- In-process monitoring
- Final product testing

Process Development

- Raw material pre-processing
- Moulding process
- Extrusion process
- Packaging

2. Scale

R&D



Prototyping

Tech Transfer



Sml. Scale, Clinical trails,
Registrations

Production



Cost driven, Scalable
Manufacture

3. Highly Potent APIs



High potent APIs

- Progestins
- Estrogens
- GnRH
- etc.

DEC Business as Usual

- >10t of hormone into implants p/a
- 10m implants to 56 countries

Specialised Facilities

- Laminar Flow Suites
- Environmental monitoring

Summary

- Drug delivery
 - Development and GMP manufacture of moulded and extruded devices
- Why DEC?
 - End-to-end support
 - Scale
 - Infrastructure for highly potent APIs
- And of course

Enabling our Partners
...to Teach
Old Dogs New Tricks

