

PCI Pharma Services

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PHARMA SERVICES

ADVANCED DRUG DELIVERY SOLUTIONS

Seeking advanced drug delivery for targeted and controlled release of novel molecules, PCI's integrated drug manufacturing and packaging solutions support biopharma companies in optimising dosing and providing convenient, easy-to-use, patient-centric therapies to patients.

STERILE FILL-FINISH AND LYOPHILISATION

PCI's global manufacturing capabilities in complex sterile formulations and lyophilisation cover a broad range of next-generation injectable technologies, including nanoparticles, mRNA, monoclonal antibodies, proteins, oligonucleotides and other biologics across multiple delivery formats, from vials and prefilled syringes to cartridges for autoinjectors (Figure 1). PCI provides integrated large- and small-molecule solutions for clinical and commercial projects and, with over 20 years in the sterile fill-finish and lyophilisation manufacturing space, the company is dedicated to its partners' success in bringing life-changing therapies to patients.

"PCI has the scalability to handle the dynamic volumes of biopharmaceutical therapies, whether large or small, from niche personalised medicines to large-volume treatments."



Figure 1: Aseptic syringe filling using advanced robotic isolator technology.

DRUG-DEVICE COMBINATION PRODUCTS

Driven by innovation and patient centricity, PCI's design and development expertise, combined with its device assembly and advanced packaging capabilities, offers flexible solutions for a diverse portfolio of conventional and specialty injectable drug delivery devices (Figure 2). PCI has the scalability to handle the dynamic volumes of biopharmaceutical therapies, whether large or small, from niche personalised medicines to large-volume treatments.

Tailored to its partners' unique design, development and manufacturing needs, PCI offers a complete range of capabilities, services and expertise:

- Expert design process focused on human-factors engineering and technical functionality

- Optimising designs for manufacturability, scalability and automation
- Fully end-to-end drug-device combination packaging including:
 - Prefilled syringe assembly
 - Pen injector, autoinjector and on-body injector final assembly
 - Safety syringe assembly and precision labelling
 - Integrated top-load cartoning
 - In-process testing and final release
 - Serialisation
 - Cold-chain storage.

INJECTABLE PACKAGING SERVICES – CLINICAL THROUGH COMMERCIAL

With true customer focus and flexibility at the core of its pharmaceutical packaging service offering, PCI is able to adapt to the unique requirements of each global market, from concept to commercialisation.



Figure 2: Assembly and labelling of autoinjectors.

PCI is the partner of choice in providing scalable packaging services, supporting niche orphan drugs through to large-scale biopharmaceuticals with tailored injectable packaging solutions including:

- Labelling of vials, ampoules, pens, prefilled syringes, autoinjectors and on-body injectors
- Tyvek blistering for parenterals
- Drug-device combination product assembly
- Cartoning
- Kitting and protective packaging
- Overwrapping and pouching
- Cold chain packaging and labelling (2–8°C, -20°C, -40°C, -80°C, -196°C).

SPEEDSOLUTIONS™

Harnessing decades of drug product development and commercialisation experience, PCI's integrated speed solutions simplify supply chains from the earliest stages of development through to approval, launch and beyond. Speed solutions, such as packaging design and artwork

“PCI facilitates rapid prototype design to support patient and physician focus groups that provide vital insight into patient usability and acceptability.”

services, provide innovative, value-added services for its clients. PCI's dedicated team of in-house design specialists deliver insightful packaging design and practical knowledge to deliver differentiated and cost-effective packaging solutions. Using three-dimensional modelling, PCI facilitates rapid prototype design to support patient and physician focus groups that provide vital insight into patient usability and acceptability, as well as supporting regulatory filings, expediting responses and enabling true speed to market.

FUTURE INVESTMENTS

Meeting the growing needs of its clients for their life-changing biologic drug products, PCI continues to invest in both its manufacturing and packaging capacities and capabilities. Over the next 12 to 18 months, PCI has committed to invest over US\$250 million (£202 million) to expand its global sterile fill-finish and lyophilisation manufacturing capabilities together with its clinical and commercial advanced drug delivery packaging service offering for injectables.

These investments reflect the outlook and the market demand PCI envisages for injectable drug products. As a leading global CDMO, PCI not only wants to meet growing demand for scalable biologic manufacturing and advanced drug delivery packaging but, through innovative value-add solutions, the company aims to exceed customer expectations, delivering flexibility and excellence in all that it does to accelerate the development and commercialisation of life-changing therapies.

ABOUT THE COMPANY

PCI is a leading global CDMO, providing integrated end-to-end drug development, manufacturing and packaging solutions to increase product speed to market and opportunities for commercial success. PCI brings the proven experience that comes with more than 90 successful product launches each year and over five decades in the delivery of supply-chain healthcare services. With 30 sites across Australia, Canada, North America, the UK and Europe and over 5,250 dedicated employees, the company's mission is to bring life-changing therapies to patients. Leading technology and continued investment enable PCI to deliver development to commercialisation solutions throughout the product lifecycle, collaborating with its clients to improve the lives of patients globally.

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Your injectable drug product destination. Our world.

Advanced Drug Delivery

Driven by innovation and patient-centricity, our design and development expertise combined with our device assembly and advanced packaging capabilities offer flexible solutions for a diverse portfolio of conventional and specialty injectable drug delivery devices.

END-TO-END DRUG DEVICE COMBINATION PRODUCT SOLUTIONS:

- Sterile fill-finish of syringes and cartridges for auto-injectors
- Final assembly and labeling of:
 - ▶ prefilled syringes
 - ▶ auto-injectors
 - ▶ pens
 - ▶ on-body injectors
- Integrated top-load cartoning
- Serialization
- Cold chain storage

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Your bridge between life-changing therapies and patients