



FOR IMMEDIATE RELEASE

PCI and CSP Technologies, Inc. Announce Strategic Collaboration for Breakthrough Activ-Blister™ Solutions

In scavenging for undesired moisture and gases, protective packaging solution enables enhanced shelf life and speed-to-market for pharmaceutical and medical device products

Philadelphia, PA & Auburn, AL – September 17, 2018 PCI Pharma Services (PCI), a full-service provider of specialist outsourced drug manufacturing, clinical trial services, and commercial packaging to the global healthcare industry, is pleased to announce its exclusive collaboration agreement with CSP Technologies, Inc. for U.S. clinical trials and stability testing utilizing Activ-Blister™ packaging solutions, which help protect and promote speed-to-market for pharmaceutical and medical device products with heightened susceptibility to moisture and gases, especially oxygen.

With more than 400 patents, CSP Technologies, Inc. is a world leader in moisture protection and gas scavenging solutions, and has developed several gas scavenging solutions to protect sensitive products in a variety of industries, including pharmaceuticals, drug delivery systems/medical devices, diagnostics, food, and sensitive electronic components. Activ-Blister™ solutions is among CSP's latest innovations, designed to actively control the internal atmosphere/headspace of individual blister cavities without the use of purging, allowing for improved stability and enhanced shelf life.

Using silica gel and molecular sieve technology, Activ-Blister™ solutions can absorb tailored amounts of moisture, oxygen and other gases, and can be produced in shapes and sizes to accommodate any tablet or capsule. The technology can be applied without changes to the existing footprints of packaging lines. Activ-Blister™ solutions can be incorporated into a wide range of blister packaging formats, including push-through blisters, peel/push blisters, cold-form foils and high barrier films containing Aclar® laminates.



“Increasingly, we are seeing a need from our clients for supporting sensitive drug products,” noted Bob Misher, Senior Vice President, PCI Clinical Services. “With the pressure on pipeline development to reduce lead-times and reduce drug development costs, coupled with a growing focus on specialized medicines, our clients are challenged to get products through clinical phases and into commercialization more quickly than ever before. Often, this results in drug products that are very sensitive to moisture, oxygen or other gases and this can be problematic for both expedited clinical study as well as in progressing to commercialization.”

Bob continued: “Traditionally this has required the use of high barrier films and foils and potentially packaging in modified environments to attempt to achieve the required shelf life. With CSP’s Activ-Blister™ solutions, the proven technology will substantially impact the success of the packaging system in achieving optimal shelf life, resulting in faster speed-to-market for our clients. We have already seen considerable interest in initiating studies utilizing Activ-Blister™.”

According to Craig Voellmicke, Vice President, Business Development for CSP: “CSP has deep roots in pioneering packaging solutions for pharma, nutraceuticals and diagnostics with materials engineered to scavenge moisture and target gases, such as oxygen. Activ-Blister™ solutions employ these capabilities to protect oral solid dose products within otherwise conventional blister materials. Collaborating with PCI combines these benefits with a world-class pharmaceutical services provider to help extend shelf life and optimize overall package design.”

As the market leader in pharmaceutical and biotech contract packaging services for clinical and commercial medicines, PCI features a global network of packaging sites across three continents, supporting medicines destined to reach over 100 countries around the world. On September 10, PCI announced the acquisition of San Diego-based Sherpa Clinical Packaging. PCI also recently expanded its global reach with the acquisition and integration of European Union based Millmount Healthcare, in Dublin, Ireland, as well as Pharmaceutical Packaging Professionals (PPP), located in Melbourne, Australia. Across this expansive supply network, PCI supports clients with cutting edge packaging technologies spanning a broad range of delivery forms, including oral



solid dose, powders, gels and semi-solids, as well as support for parenteral delivery forms including injectables, such as vials, syringes and autoinjector pens, as well as transdermal patches. PCI also offers an extensive suite of supporting services including drug development and drug manufacturing services, clinical trial supplies including global storage and distribution, as well as analytical services.

To find out more about the PCI and CSP Technologies partnership for Activ-Blister™ solutions, please visit [here](#).

Photo caption

CSP Technologies' Activ-Blister™ solutions can absorb tailored amounts of moisture, oxygen and other gases, and can be produced in shapes and sizes to accommodate any tablet or capsule.

About PCI Pharma Services

The global healthcare industry trusts PCI for the drug development solutions that increase their products' speed to market and opportunities for commercial success. Only PCI brings the proven experience that comes with more than 50 successful product launches a year and over five decades in the healthcare business. Leading technology and continued investment enable us to address global development needs throughout the product life cycle — from Phase I clinical trials through commercialization and ongoing supply. Our clients view us as an extension of their business and a collaborative partner, with the shared goal of improving patients' lives. For more information, please visit www.pciservices.com or follow us on Twitter at [@PCI_Social](#).

About CSP Technologies, Inc.

CSP Technologies, Inc. is a global material science company providing innovative, highly engineered advanced packing solutions to protect sensitive products. CSP is a responsive, flexible partner committed to offering customers a single, reliable source for custom product design, development, and manufacturing. CSP has a proven track record of pioneering technological solutions that ensure product protection and enhance its customers' brand equity. Its product categories include vials, bottles, films, blisters, molded components, and specialized packaging solutions.

CSP Technologies, Inc. has developed solutions and services to address packaging concerns in a variety of industries, including Pharma/OTC, Diagnostics, Industrial, and Food and Nutrition. For more information, call (334) 887-8300, email cspinfo@csptechnologies.com or visit www.csptechnologies.com.

Contact

Tom Gosschalk / Carrie Lowe at BECG
tom.gosschalk@becg.com / carrie.lowe@becg.com

T: +44 (0)20 3697 07647 / +44 (0)1962 893 913