

# Purcision™ Respiratory Opportunities

## The Challenges of Respiratory Treatments

### Is smaller better?

Conventional dissolution improvement models focus on reducing particle size to increase surface area and thus improve dissolution and bioavailability. Critech's patented Purcision technology shows that smaller is not always better.

Purcision enables us to modify crystal form and particle shape, as well as particle arrangement. Adding these variables gives us greater creativity and more control in achieving desired particle design.



### What is Purcision?

Purcision is Critech's patented supercritical precipitation (SCP) platform for drug development.

It is a proven particle engineering technology to develop new drugs and reformulate and repurpose existing drugs for multiple delivery systems.

### Purcision is particularly effective to engineer particles for inhaled delivery.

- Purcision technology is different from other particle engineering technologies (CESS, RESS, spray drying, milling).
- Purcision technology has a unique ability to engineer large particles with surface area of a much smaller particle.
- Unique disproportionate surface area to particle size ratio is optimal for local, targeted delivery (e.g., tumor, lung, et. al.).
- The larger size Purcision particles allow for retention at target site and large surface area provides effective drug release.

## Purcision Can Help Overcome Challenges Associated With Developing Inhaled Drugs

### Attributes

- Crystalline powders
- Low density
- High surface area
- 100% pure drug – noexcipients
- Uniform and consistent particles
- Improved flowability

### 2020 Global Respiratory Diseases Drug Market ~\$90B



### Performance

- High drug load
- Long duration
- Avoid phagocytosis
- Highly stable
- Larger particles stick at site of administration but release drug like smaller particles
- Maximizes flow from DPI

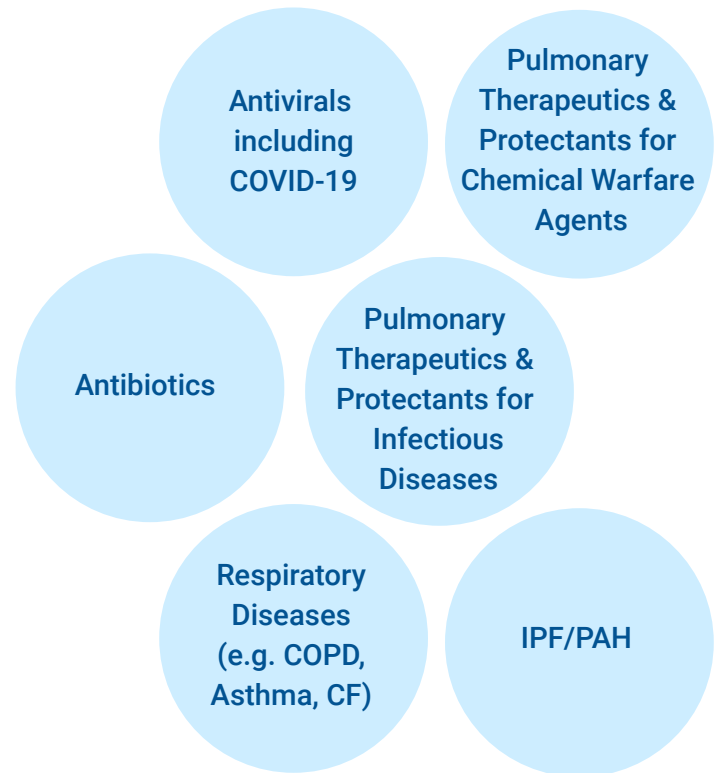
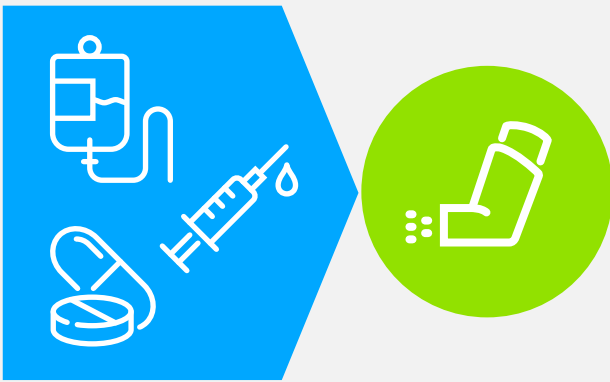
## Creating Many Opportunities for Respiratory Drug Development

See Next Page →

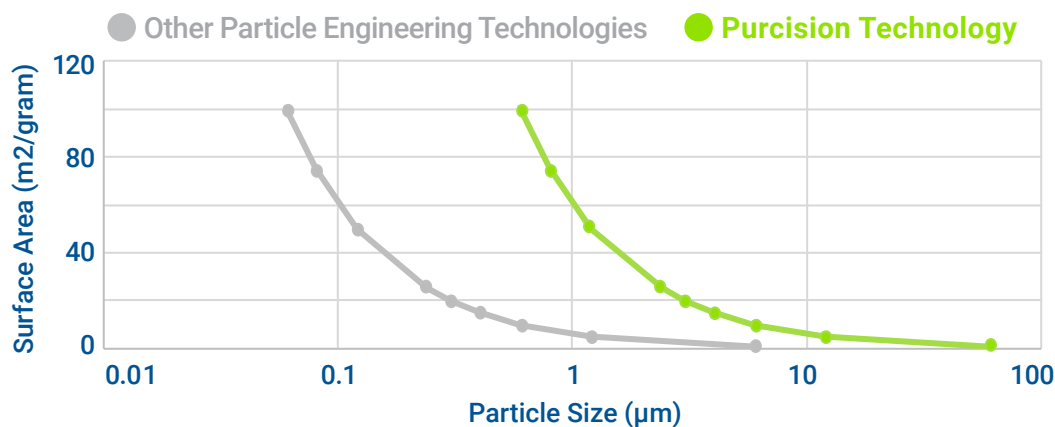
# Purcision™ Respiratory Opportunities

## Our Patented Purcision Platform Creates Many Opportunities for Respiratory Drug Development

- Second chance for “shelved” drugs
- Reformulation of current IV and oral drugs for inhaled delivery
- New drugs



## Compare the Results



Purcision Produces Larger Particles With Higher Surface Area Ideal for Targeted Delivery Into the Lungs