The Metabo-oncology Company

Metabo-oncology — which focuses on the link between cancer and metabolic hormone dysfunction — is poised to spark a paradigm shift in cancer treatment.

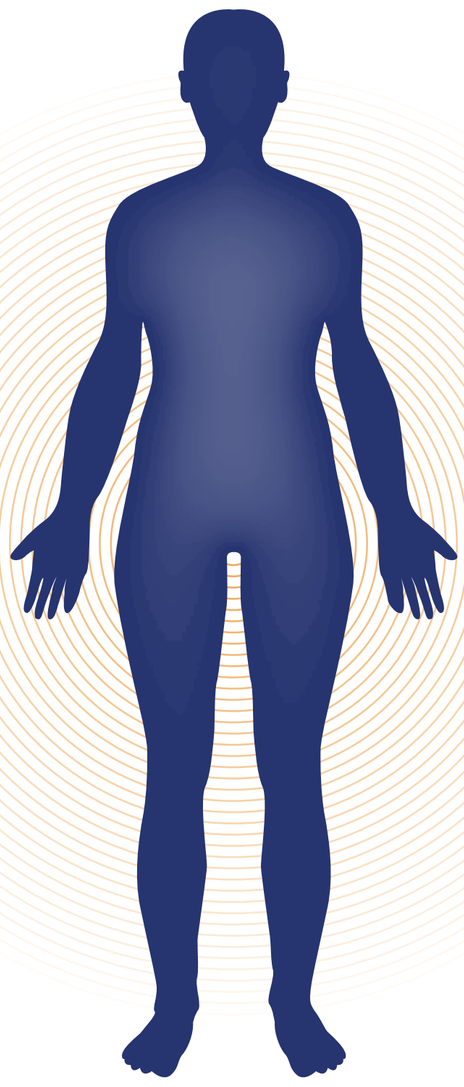
Cancer and obesity are closely linked, yet little attention is paid to these patients and their special needs. SynDevRx – the leader in this emerging and important field – is changing that.

More on metabo-oncology

Treating Cancer *and* Metabolic Hormone Dysfunction

It's a fact: People with metabolic hormone dysfunction, which is common in obese and overweight individuals or people with excess belly fat, are more likely to get — and die from — cancer. At least 10 tumor types, representing about 20 percent of U.S. cancer cases, are considered to be sensitive to key metabolic hormones.

No novel therapy is available for the metabo-oncology patient population. But SynDevRx is working on it.



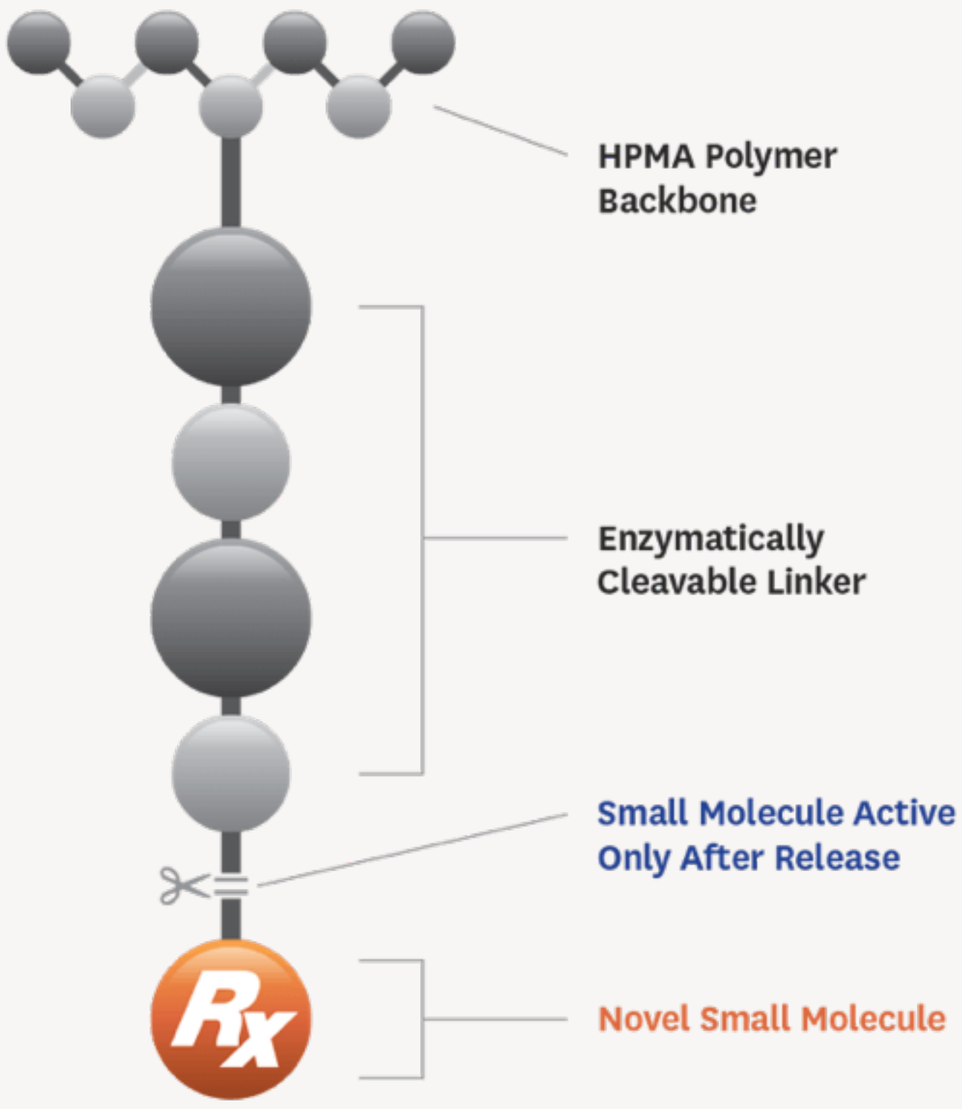
Our lead compound,

SDX-7320

is a methionine aminopeptidase type II (MetAP2) inhibitor that proposes to both treat the tumor directly and correct the underlying metabolic hormone dysfunction — sort of a one-two punch to cancer.

We believe it will eventually transform cancer treatment for millions of cancer patients worldwide

Our Lead: SDX-7320 → | Metabo-oncology → | The Target: MetAP2 →



SynDevRx is developing SDX-7320

SDX-7320 works as a combination therapy agent in multiple cancer indications, starting with ER+/Her2- breast cancer.

Learn about ongoing and upcoming clinical trials.

Learn More

About Us

Our work has the potential to improve and save the lives of millions of people worldwide.

All of us know people who have suffered and perhaps even died due to cancer. SynDevRx is dedicated to developing treatments for the rising number of patients whose cancer is associated with metabolic dysfunction.

Leadership & Management → | Board of Directors → | Medical and Scientific Advisors →

Where It All Began

SynDevRx co-founders Brad Carver and Jim Shanahan recognized that countless research hours and dollars go into promising drug candidates that make it into the clinic, only to face toxicity issues that prevent further development and approval.

One compelling example is fumagillin-class small molecules, which have shown clinical activity in both cancer and obese patients but have also caused toxicities. That gave us a starting point for our drug development program.

It's nothing new for a pharma to pick up a discarded asset and then develop it for a different patient population or indication. SynDevRx, however, has taken a different tack. Through our proprietary polymer-drug conjugation approach, we've worked to enhance the efficacy of fumagillin-class drugs in cancer patients while reducing the toxic effects.

In 2015 our co-founders saw that no one in the pharmaceutical industry was focusing on the unique needs of cancer patients who are also overweight or obese. So they directed our lead compound, SDX-7320 — which had shown activity in both metabolic and cancer animal models — toward this "metabo-oncologic" patient population.

A Passion for Our Work

From day one, Carver and Shanahan have run SynDevRx with an eye toward efficiency.

We've moved our lead compound from discovery and early chemistry through patenting and into late-stage Phase 1 trials at costs well below the industry norm.

The SynDevRx team includes an impressive roster of well-known clinical oncologists, leaders in academic research, professors from premier institutions and experienced drug development professionals. Many came here with direct, hands-on research and clinical experience with fumagillin-based small molecules. In fact, Don Ingber, M.D., Ph.D., a member of our Scientific Advisory Board, actually discovered fumagillin-class compounds in 1985.

Every day, we put our heart and soul into our business, never forgetting that clinical success would mean transforming cancer treatment as we know it. That's a powerful motivation, and we won't stop until we get there.

Metabo-oncology

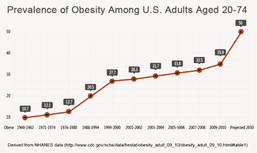
First, it was chemotherapy alone. Then came targeted therapies.

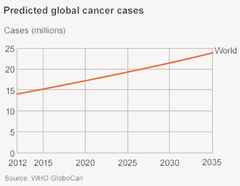
Most recently, we've seen the advent of immuno-oncology, which has taught us that cancer involves multiple biologic systems across the whole body.

At SynDevRx, we recognize that metabo-oncology will be the next major advancement in cancer treatment.

What is metabo-oncology?

Basically, it's an area of research focused on the connection between cancer and metabolic hormone dysfunction (which is typical in overweight and obese people). Before getting into the details, though, let's take a step back.





The Root of the Problem

Obesity rates are on the rise in the United States and around the world. Besides increasing the incidence of heart disease, diabetes and metabolic dysfunction, this trend puts people at greater risk of both getting cancer and dying from it. As reported in the Journal of Clinical Oncology:

> *"Obesity is associated with worsened prognosis after cancer diagnosis and also negatively affects the delivery of systemic therapy, contributes to morbidity of cancer treatment, and may raise the risk of second malignancies and comorbidities."*

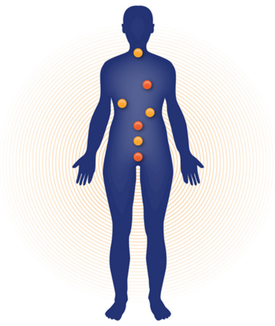
Obesity is characterized by excess adipose (or fat) tissue. Excess visceral adipose tissue (belly fat) is common in overweight and obese patients, and releases a variety of hormones that are stimulative to cancer. Over time, this fat depot can become inflamed, leading to systemic insulin resistance and the overproduction of insulin. This combination of events creates an environment that actively promotes tumor growth and metastasis.

Target Patient Population

Research has shown a link between metabolic hormones and worse outcomes for reproductive and digestive cancers, comprising at least 10 types of cancer:

- Breast (postmenopausal)
- Colorectal
- Endometrial
- Esophageal
- Gallbladder
- Kidney
- Liver
- Ovarian
- Pancreatic
- Prostate (advanced)

These "metabolically sensitive" tumors comprise about 20 percent of cancer cases in the United States and account for over 80,000 deaths from cancer per year. These patients have higher cancer mortality rates than their metabolically normal counterparts. Currently, no novel treatments target this population.



The Leader in Metabo-oncology

Within the medical and research communities, there's growing awareness about the negative connection between metabolic hormone dysfunction and cancer outcomes.

Today, there are no therapies that specifically address the myriad factors that accelerate tumor growth in overweight and obese patients with cancer.

SynDevRx is filling that gap, thus giving hope to the thousands of patients for whom traditional treatments wither don't work at all or only work for a short time. We believe that by correcting the underlying metabolic dysfunction, SDX-7320 can reduce the tumor-stimulating hormones and inflammation while also directly treating the tumor in our target patient population. This hypothesis — which we're exploring through clinical trials — is guiding the development of our lead compound.

We look forward to meeting the challenges of bringing metabo-oncology products to the market and to improving clinical outcomes for the millions of cancer patients with underlying metabolic hormone dysfunction worldwide.

Get in touch with us.
We'd like to hear from you.

If you'd like information on metabo-oncology, our clinical trials, our team or anything else SynDevRx-related, we welcome your inquiries.

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