

ITHS Gene & Cell Therapy Lab: Exploring a Treatment for Advanced Ovarian Cancer

DONOVAN

Hi I'm Donovan Farris, I'm the manager at the Gene & Cell Therapy Lab here at the University of Washington. We're part of the Institute of Translational Health Sciences.

LOWER THIRDS:

Donovan Farris, Manager
Gene & Cell Therapy Lab

DONOVAN:

Our mission is to help researchers get their products out of the lab and into the clinical trials,

DONOVAN:

... we have a facility with 4 manufacturing suites. We have - commercial experience as well as research experience.-We can work with the researchers to get the products that they need manufactured quickly and effectively and as inexpensively as they can probably find anywhere else on the market. - that meets the regulations required by the FDA.

LOWER THIRDS

Nora Disis, MD
ITHS Principal Investigator

NORA:

They develop products such as stem cells, t-cell therapy and most recently, we started a collaboration with –

CUT TO: GRAPHIC PRECIGEN ULTRACAR T-CELL DIAGRAM

NORA:

...Precigen to really bring a new generation of what's called car-t cell therapy to the clinic.

SASHA:

LOWER THIRDS:

Sasha Stanton, MD

SASHA:

Precigen had - this PRGN 3005 ultra car t-cell

CUT TO: GRAPHIC OF OVARIAN CANCER

SASHA (CONT):

...which was targeted against ovarian cancer. Car-t cells for the most part are made by retroviruses. ...You take out the patients t-cells, you modify them and then you have to grow them outside the patient about three months and then you give them back to the patient.

NORA:

06:10 The patients that enroll in car-t cell studies are sick, they don't have the time to wait a month or more to be able to get their cells back.

CUT TO: PAN OVER GRAPHIC T-CELL THERAPY PROCESS

SASHA:

... the Precigen design team had realized that there was a problem with that and so they designed a construct that did this much faster. The goal is to actually have them make these car-t cells and give them back to the patient within two days.

CUT TO: GRAPHIC MBIL15

NORA VO:

... they've also engineered a survival signal into the cell and once the cell begins to attack the tumor ...instead of dying, the cell begins to proliferate in the body, makes new cells that will be able to keep attacking the tumor

SASHA:

... so they had this product that looked very good in the laboratory, but what they needed was they needed the partnership to then bring that to patients and that's where the Gene and Cell Therapy Lab has been incredible. While Donovan is making up the

cells, we are making sure that the patient's labs look good; the patient is healthy enough to receive the product.

SASHA:

The Gene and Cell Therapy Laboratory is in the same unit as the ITHS Translational research unit and that is an incredible benefit because we have the scientists that are making the cells and are producing the product collocated with the research staff that are infusing the cells and giving the product

DONOVAN:

There's not a lot of places in the United States that is capable of doing that, especially at such a beginning stage level of like a phase 1 trial. So I think we bring a unique set of skills, a unique facility into a space that desperately needs this type of capacity.

SASHA:

The women that are getting this product have progressive ovarian cancer and they don't have three months when they are not responding to a therapy

DONOVAN:

I love the idea that we are able to manufacture products on a day to day basis that are directly impacting patients' lives.

DONOVAN:

These are specialized medications, specialized medicines that are going from our lab into one person that has a very desperate need for these products

SASHA:

So these women are giving us this wonderful gift of agreeing to do a clinical trial where they don't really know what the outcome will be.

SASHA:

... and you are telling her that this is the first time that this has ever been given to a human being –and she says sign me up that is amazing.

ITHS logo comes up and text:

For more information, please visit <https://www.iths.org/investigators/units/gct/>