## Storing 2 different size doses in 1 Package

## The Challenge 1:

To standardize the overall dimensions of aluminum cassette designs to be implemented as part of the CAR-T program. The standardization of the overall dimension on such designs reduces to a minimum the amount of packaging components (e.g. frames, extractors, UN3373 bags, etc.) to be implemented as part of the program's packaging solution. All the while maintaining the integrity of the therapy and cryogenic bags throughout the cold chain.

Client is using 2 different cryogenics storage bags for 2 different size doses of the therapy. One bag of 250 ml capacity and the other 50 ml capacity.

## The Challenge 2:

Client has started validation process with a cassette that is oversized for the cryogenic storage bag. They need to solve the problem of bag breakage during shipping and handling due to the sloppy fit of the oversized cassette but are reluctant to restart the validation process with a smaller more appropriately sized cassette.

## The Solution

The appropriate fit between the cryo bag and the cassette is critical to avoid the issue of bag breakage during handling and shipping. For Challenge #1 making sure the cassette is size properly for the larger, 250 ml, bag was the first step. We then created a cassette with a cassette by utilizing two simple flanges to create a package area for the smaller, 50 ml bag, within the 250 ml cassette that created a secure fit for the 50 ml bag.

Challenge 2 was just a variation of the first. Using the same concept, we created a storage area within the oversized cassette that sheltered the bag appropriately.

