

# CacoReady 24-wells

## Intestinal Permeability and Drug-Transporter Interactions

### Experimental Data

Apparent Permeability ( $P_{app}$ ) values and Efflux Ratios (ER) for low, medium and high permeability reference compounds and Pgp substrates. Assays were performed after exposing **CacoReady** to the shipping medium during a 4-day period and a subsequent 72-hr recovery in fresh culture medium.

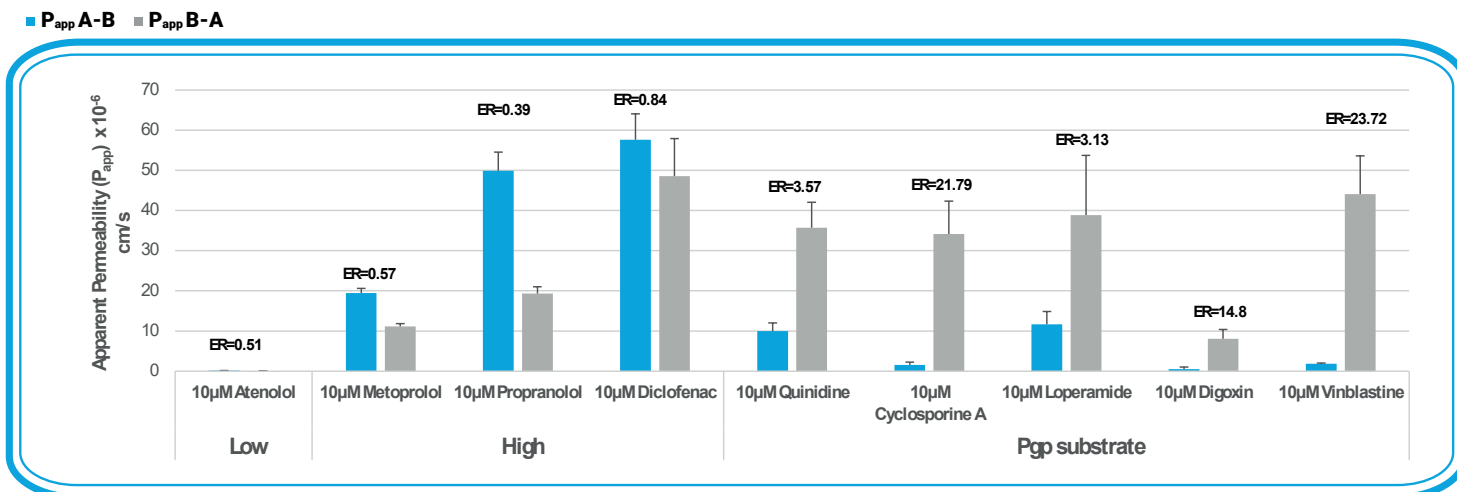


Figure 1. Reference compound's intestinal permeability.

## CacoReady reproducibility among batches

Batch-to-batch variation was evaluated with low (atenolol), high (metoprolol) and Pgp (digoxin) reference compounds. These data are the result of 3 independent experiments.

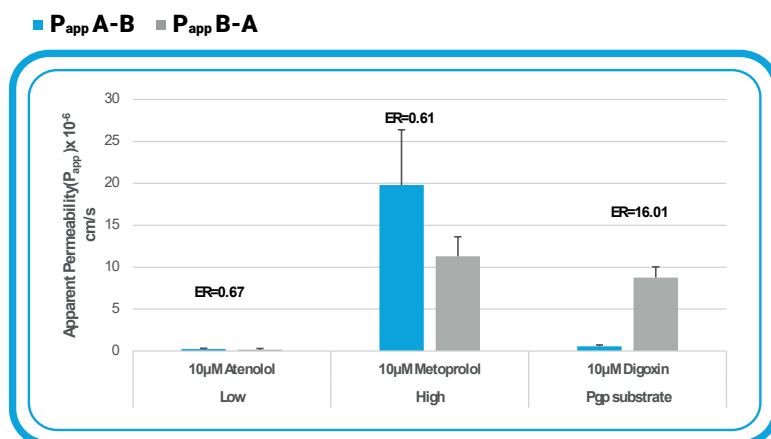


Figure 2. Reference compound's intestinal permeability (batch-to-batch variation).

## Quality Controls

Transepithelial Electrical Resistance (TEER) and Lucifer Yellow Paracellular Permeability were employed to evaluate CacoReady cell barrier integrity. Assays were performed before (pre-) and after (post-) adding the shipping medium for delivery.

■ CacoReady 24-wells ■ LY Permeability ● LY Flux

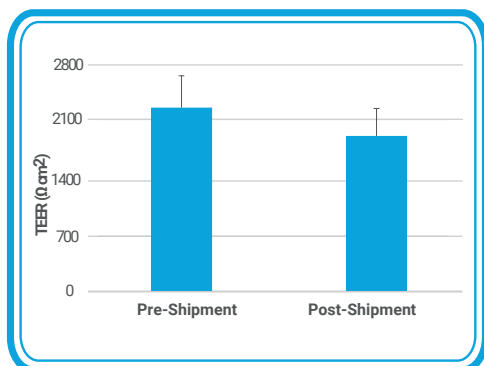


Figure 3. Changes in TEER values throughout the CacoReady manufacturing process. These data are the result of 3 different batches.

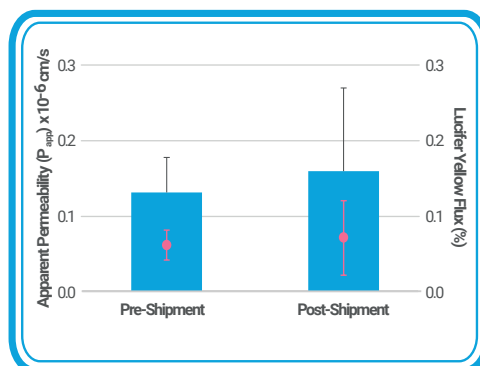


Figure 4. Lucifer Yellow Paracellular Permeability  $P_{app}$  before (pre-shipment) and after (post-shipment) adding the shipping medium. These data are the result of 3 different batches.

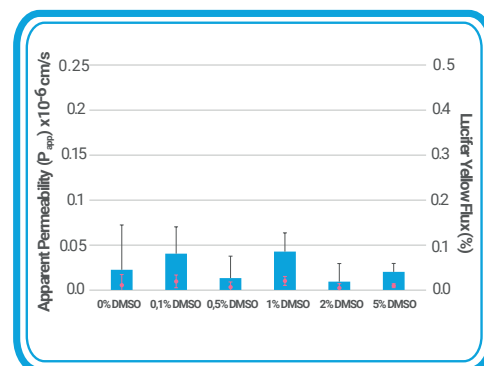


Figure 5. Effect of DMSO on barrier integrity of CacoReady cell monolayers. These data refer to a single experiment in triplicates.

Caco-2 regulatory requirements are detailed in the 2020 FDA and 2012 EMA Drug Interaction Guidelines and the ICH M9 Guideline.