

OVERALL PROCESS FLOW

RIVA mimics the compounding process conducted by pharmacy staff in the laminar flow hood. Operators can import pharmacy validated, patient-specific orders directly to RIVA from the hospital pharmacy information systems or enter batch orders manually by touch screen or user station.

After orders are imported or entered, RIVA's touch screens provide pharmacy staff with information about inventory - or consumable - items required for the production run. A single operator can handle loading and operation. After the operator has gathered the appropriate items, the touch screens direct the operator where to load each specific item into RIVA. After loading all required consumables, the operator starts the production run.

RIVA prepares all orders within a dual zone, ISO Class 5 environment and therefore protects both the product and the operator. RIVA determines items required for each dose and selects and verifies these items from inventory. After identification, RIVA uses a pulsed UV system to sanitize critical sites on vials and bags. Throughout production, RIVA uses a new sterile syringe for each fluid transfer; therefore, RIVA can manage a wide variety of drugs within a single production run with the risk of cross contamination being essential zero. As well, RIVA is optimized to reduce aerosolizing and dripping or consumable items during all fluid transfers. Vials, bags, and syringes are weighed both before and after dosing to ensure accuracy.

When a dose is complete, RIVA caps syringes, labels the dosing syringe or bag, and outputs the syringe or bag to the pharmacy clean room area through an output chute. RIVA moves all consumable items within the compounding area to the appropriate waste bin or temporary storage area for use in future production runs.

When a production run is complete, RIVA goes into an idle status, waiting for the next production run. The operator can verify all orders in the collection container beneath the output chute and transport them to the appropriate patient units. Operators can also remove any waste items and replenish label printers as required.

