Supplementary Table 1: Standard Operating Procedure for UCSD Research Pharmacy Repackaging Procedures using capsule filling device for Co-encapsulated IS-Rifamate dispensed to patients.

- 1. Make sure the working counter is clutter free.
  - 2. Assemble all the materials needed for repackaging:
    - Empty opaque white, size 00EL Capsugel® capsules
      - Rifamate 300/150 mg
      - Proteus Ingestible Sensors (ISs) for repackaging, use ISs from a sealed bottle or from a partial bottle opened within the same calendar day. Destroy partial bottles the next day.
      - HDPE bottle
      - Repackaging worksheet and logPrescription labels
      - P. L. L. L. C. ...
      - Polylined Sterile Field
      - Sterile gloves / hair cover / lab coat (disposal gown and mask-optional)
         Isopropyl alcohol and gauzes
      - Pill counter tray and spatula
      - Capsule filling device
- 3. Place on hair cover, mask (optional).
- 4. Wash your hands.5. Place on lab coat (or disposable gown).
- 6. Wipe down the repackaging area, as well as the pill counter tray and spatula with gauzes saturating with isopropyl alcohol.
- 7. Remove a disposable Polylined Sterile Field and place it on the dry, clean surface of the counter.
- 8. Using the pill tray and spatula, count out the appropriate number of empty gelatin capsules,
- ISs, and Rifamate, and place them on the sterile field in separate piles.

  9. Clean the capsule filling device as directed per protocol/manufacturer's directions.
- 10. Wash your hands again.
- 11. Place the sterile gloves on.
- 12. Load the empty capsules, per manufacturer's directions, into the capsule filling device.
- 13. Visually inspect the filling tray to make sure all the capsule bodies are in the tray.
- 14. Manually add one ingestible sensor (IS) to each empty capsule body.
- 15. Visually inspect the inside of each capsule body to make sure each has one IS in it.
- 16. Manually add one Rifamate on top of the IS in the body of the capsule.
- 17. Visually inspect the inside of each capsule body to make sure each has one Rifamate in it. 18. There should be no left over components (i.e. Rifamate, ISs, or empty gelatin capsules). If
- there are, all capsules will need to be emptied, inventory evaluated, and procedure repeated.

  19. If using backfill, add the appropriate excipient and fill the capsules per manufacturer's
- directions.

  20. Close the capsules per manufacturer's directions.
- 20. Close the capsules per manufacturer's directions.21. Empty the completed capsules onto the polylined sterile field.
- 22. Visually inspect the capsules, place in the HDPE container, and close the HDPE container.
- 23. Dispose of the sterile field and gloves in the trash.
- 24. Fill out the repackaging worksheet and logs.25. Place the following labels on the HDPE container:
  - ce the following labels on the HDPE container
  - Prescription label
  - AVRC lot and exp: date label (35 days from when the IS bottle is open)
    Label explaining the storage conditions of the product
  - Label stating the drug has been repackaged by the UCSD Research Pharmacy.
- Label stating the drug has been repackaged by the UCSD Resea
   26. Fill out the drug accountably log.
- 27. File a copy of the repackaging worksheet in the study log book. File the original in the UCSD Research Pharmacy Repackaging Log Book.
- 28. Dispense the finished prescription to the patient or study coordinator.
- 29. Clean the capsule filling device per protocol/manufacturer's directions and store.