CONTINUOUS GLUCOSE MONITORS & INSULIN PUMPS

MRI WITH CONTINUOUS GLUCOSE MONITORS

- Continuous glucose monitors (CGMs) are wearable or implanted devices that continuously determine a patient's glucose level.
- MR conditional CGMs do not have to be removed prior to MRI provided the model is known and its conditions can be met. Current MR conditional CGMs include:
  - Abbott Freestyle Libre 2, Libre 2 Plus, Libre 3 and Libre 3 Plus
  - Senseonic Eversense E3 (implanted)
- All other CGMs are either labeled MRI unsafe or have not been sufficiently tested in the MRI environment and must be removed prior to MRI. Examples include Dexcom G6, G7 and Stelo; Abbott Lingo; Medtronic Guardian, Simplera, MiniMed and iPro2 and Senseonic Eversense 365.
- Patients who do not know the model of their CGM must also remove the device prior to MRI.

MRI WITH INSULIN PUMPS

- All current insulin pumps are MR unsafe.
- All insulin pumps must be disconnected prior to MRI. The insulin pump cannot be brought into the MRI scanner room.
- The ordering provider must contact Endocrinology for further instructions if an insulin pump will be disconnected for longer than 1 hour.

CT & XRAY WITH CONTINUOUS GLUCOSE MONITORS

- Continuous glucose monitors (CGMs) are wearable or implanted devices that continuously determine a patient's glucose level.
- Perform the examination without removing or shielding the CGM, although a reasonable attempt should be made to limit exposure of the CGM to the radiation beam if it is near the FOV.
- The FDA states the risk of damage to a CGM from diagnostic imaging is extremely low.

CT & XRAY WITH INSULIN PUMPS

- All attempts should be made to limit exposure of an insulin pump to the radiation beam.
- Options to reduce insulin pump exposure to the radiation beam include:
  - Move the pump as far from the FOV as the pump's tubing will allow.
  - Have the patient disconnect the insulin pump before the examination then reconnect the insulin pump following the examination.
  - The Omnipod insulin pump does not have tubing and should be removed from the FOV if the device will be in the FOV. Verify the patient has a replacement pod before the

existing pod is disconnected. Do not remove the existing pod if the patient does not have a replacement pod (even if the device will be in the FOV).

- Do not delay a truly emergent CT or xray examination to disconnect an insulin pump.
- The ordering provider must contact Endocrinology for further instructions if an insulin pump will be disconnected for longer than 1 hour.
- The FDA states the risk of damage to a CGM from diagnostic imaging is extremely low.