

For my lung cancer ontology I attempted to model the cancerstaging.org poster criteria as closely as I could, including the addition of a number of **AnatomicalStructures** (e.g., **GreatVessels**, **Carina**, **PleuralSpace**), **Fluids** (**Pericardial** and **Pleural**), adding **VisceralPleura** stages (**PL1**, **PL2**, and **PL3**), **Effusions** (**Pericardial** and **Pleural**), and **MedicalConditions** (including renaming and moving **LungCancerDiagnosis** under it). I realized as I was making these changes that the **LungCancerExamples** would not necessarily have all these specific criteria, but I preferred to be explicit and follow the criteria “to the letter” should this ever evolve into a more general-purpose ontology intended to solve real use cases in my research.

I believe I’ve successfully captured staging for all patients except **Patient9** – assuming that **Patients** appearing as a descendent of a given stage in the **Inferred Class Hierarchy** is acceptable as classification. I believe the ontology failing to classify **Patient9** is likely due to the tumor size (3cm to 5cm), but after much experimentation and review of Manchester syntax I was not able to determine why my logic in **T2a** and **Stage1B** were not sufficient for classification. Therefore I look forward to working with my team to hopefully build upon this solution.