

2020 RSNA PE Detection Challenge

Dataset Description

Imaging Modality and Contrast	Computed tomography <ul style="list-style-type: none">● RadLex ID: RID10321 Iodinated contrast agent <ul style="list-style-type: none">● RadLex ID: RID11583● Intravenous
Procedure (Orderable)	CT Chest W contrast IV and CT angiogram Pulmonary arteries for pulmonary embolus W contrast IV (88322-3)
Annotation Pattern	Examination-level label <ul style="list-style-type: none">● PE<ul style="list-style-type: none">○ Negative exam for PE○ Indeterminate (1+)<ul style="list-style-type: none">■ Quality Assurance (QA)-motion■ QA-contrast○ Pulmonary embolism present<ul style="list-style-type: none">■ Location (1+)<ul style="list-style-type: none">● Central PE● Right-sided PE● Left-sided PE■ Right ventricle (RV)/left ventricle (LV) ratio (pick one)<ul style="list-style-type: none">● <1● ≥1■ Type<ul style="list-style-type: none">● Acute PE● Acute and chronic PE● Chronic PE○ True filling defect not PE○ Flow ArtifactImage-level label<ul style="list-style-type: none">● PE present on image (yes/no)
Annotation methodology and structure	Method of annotation <ul style="list-style-type: none">● Manual Number of annotators <ul style="list-style-type: none">● Training set: 1● Testing set: 3 Annotation output <ul style="list-style-type: none">● JSON Annotation software <ul style="list-style-type: none">● md.ai
Data use agreement/licensing	<ul style="list-style-type: none">● Non-commercial purpose● Registration (e.g., the intent of use)● References to dataset● Creative commons● Versioning

Imaging file and structure set format	<ul style="list-style-type: none"> • DICOM • JSON files (md.ai schema)
Slice thickness (in mm)	3 mm minimum
Image Characteristics	Resolution <ul style="list-style-type: none"> • Original Pre-processing <ul style="list-style-type: none"> • Resampled sub-3mm images to 3mm Burned-in PHI <ul style="list-style-type: none"> • No Plane <ul style="list-style-type: none"> • Axial Reformatting <ul style="list-style-type: none"> • None
Labeler demographics	<ul style="list-style-type: none"> • Specialty: thoracic radiology
Reference	Colak E, et al. The RSNA Pulmonary Embolism CT Dataset https://pubs.rsna.org/doi/10.1148/ryai.2021200254