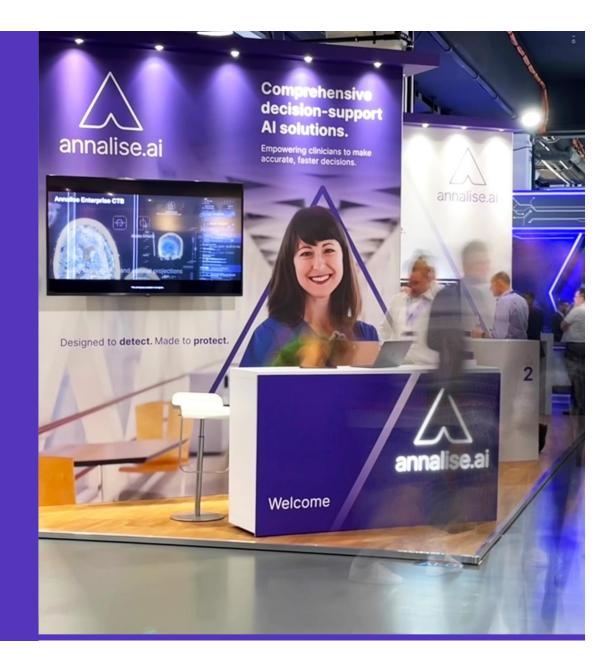
# △annalise.ai



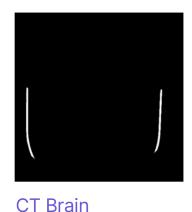
# ▶ Annalise.ai is impacting radiology where needed most Building an enterprise solution prioritising clinical volume and criticality

## △annalise.ai



Chest X-ray
Up to 124 findings
Available in 40+ countries

~26% of radiology volume\*



Up to **130** findings
Available in **40+ countries** 

~3% of radiology volume\*

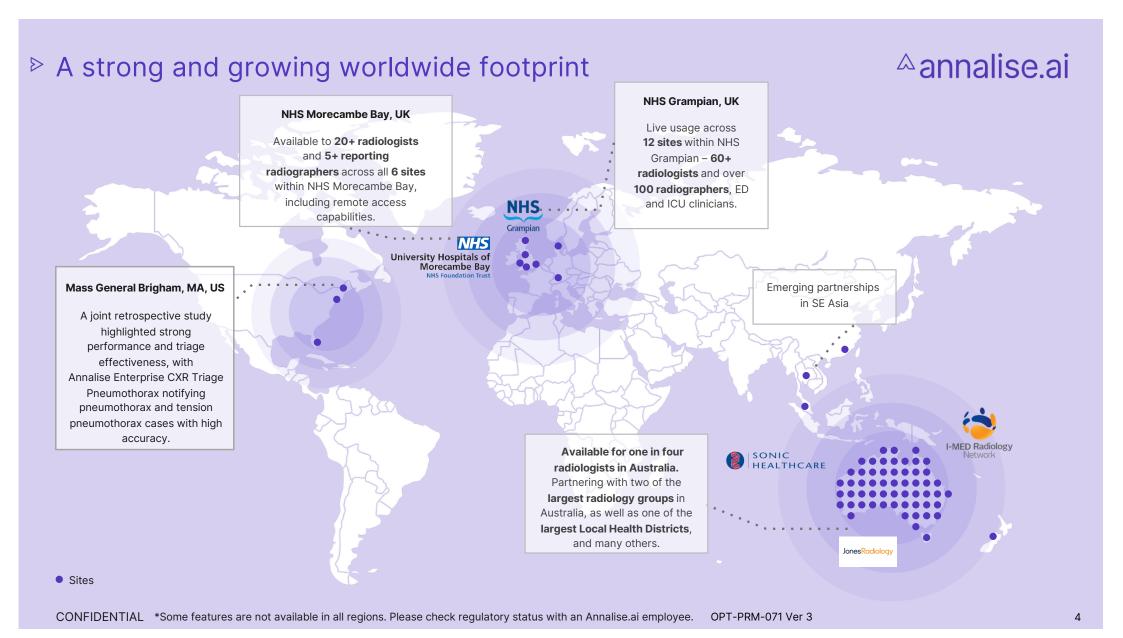


CT Chest

Planned comprehensive In active development

~6% of radiology volume\*

<sup>\*</sup>Source: Diagnostic Imaging Procedure Volumes Database – World (Signify, January 2022), including X-ray, CT and MRI procedures estimate 2021







Backed by strong & experienced investors

Backed by I-Med Radiology, Blackbird Ventures, Horizon **Ventures and Skip** Capital



Growing global team, led by experts in the field

Annalise ai is a growing team, with over 300 people committed to it's mission. Steered by an experienced HealthTech leadership team



Comprehensive, anatomy based approach

### Most comprehensive Al solutions addressing both acute and chronic findings, providing visualisation and confidence bars.



One of the largest known radiology databases

CXR built on >782,000 studies

CT Brain built on >229,000 studies

Enriched with edge cases



No shortcuts: Radiologist labelled datasets

At least 3 radiologists independently labelled all the datasets.

> Not just NLP for labelling.



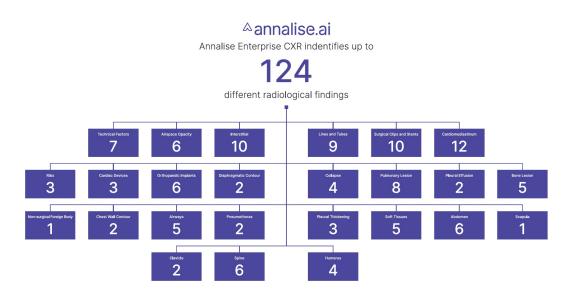
Implementation experience & user centred

> **Intuitive User** Interface

**Vendor agnostic** design. Easy integration with most known IT platforms.

# ▶ Annalise Enterprise CXR: Comprehensive coverage of relevant abnormalities in a chest X-ray

# △annalise.ai



### Develop ontology tree

 Map and categorise all relevant chest X-ray findings in consultation with thoracic experts.

### Categorise based on criticality

- Important step for worklist triage and driving workflow efficiencies
- Customisable by care setting (e.g., ICU, trauma, general).

### Set thresholds

- Based on acceptable accuracy levels.
- Customisable by care setting (e.g., ICU, trauma, general).

# 124 findings on chest X-rays covered by

# **Annalise Enterprise CXR**

### **TECHNICAL FACTORS**

Patient Rotated	Obscured by Chin	Underinflation	Underexposed	Overexposed	Lungs Incompletely Imaged	Obscured by Object
	Se Sep	10	(State)	75	11	

#### **LINES AND TUBES**

Central Venous Catheter IN POSITION	Central Venous Catheter SUBOPTIMAL	Pulmonary Arterial   Catheter IN POSITION	Pulmonary Arterial Catheter SUBOPTIMAL	Intercostel Drain	Nasogastric Tube IN POSITION	Nasogastric Tube SUBOPT MAL	Endotracheal Tube IN POSITION	Endotracheal Tube SUBOPTIMAL
THE STATE OF THE S	置		1	Man.	No. of Street, or other transfer or other transf	# 9	-	The state of the s

#### **SURGICAL CLIPS AND STENTS**

Aediastinal / Hilar Clips	Neck Clips	Axillary Clips	Abdominal Clips	Lung Sutures	Aortic Stent	Coronary Stent	Airway Stent	Oesophageal Stent	Biliary Stent
Maria	1	9		-	M. S.	<b>*</b>	15	18	A

#### **ORTHOPAEDIC IMPLANTS**

Rib Fixation	Shoulder Fixation	Shoulder Replacement	Rotator Cuff Anchor	Clavicle Fixation	Spinal Fixation
Man.	Miles I	IL	-	The same of the sa	AS

### **CARDIAC DEVICES**

Pacemaker / Electronic Cardiac Device or Wires	Valve Prothesis	Sternotomy Wires
100		-

**BONE LESIONS** 

# **RIBS**

SPINE









**CARDIOMEDIASTINUM** 

AIR SPACE OPACITY

**PULMONARY LESION** 

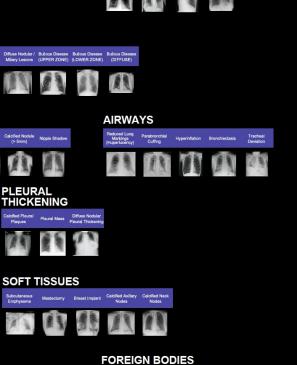
**PNEUMOTHORAX** 

INTERSTITIAL



PLEURAL THICKENING

PLEURAL EFFUSION



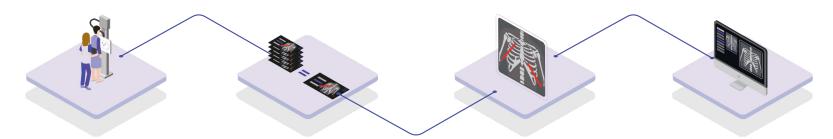
COLLAPSE

#### **ABDOMEN**



# ▶ Annalise Enterprise CXR: Trained on one of the world's △annalise.ai

Unlike vendors who train Al algorithms on NLP-extracted labels from reports or labels generated by radiographers and medical graduates, Annalise.ai used fully-qualified radiologists to create 280+ million labels.



From a data-set of 782,000+ unique CXR studies.

largest hand-labelled CXR datasets

Labelled by at least 3 radiologists

who independently handlabelled every CXR study. More than **145** radiologists were involved in data labelling. Generating 280,000,000+

CXR labels with fully qualified radiologists. No shortcuts in labelling.

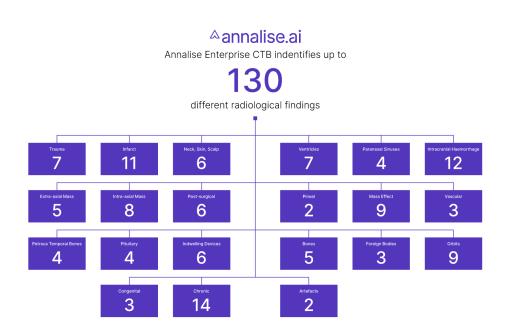
To bring you

124 findings
detected by Annalise
Enterprise CXR.

Source: Data on file

# ▶ Annalise Enterprise CTB: comprehensively cover relevant abnormalities in a head CT

### △annalise.ai



### Develop ontology tree

- Map and categorise all relevant CT Brain findings, in consultation with neuroradiology experts.
- For example: Training the algorithm to differentiate between calcified meningioma, extra-axial haemorrhage and a bleed (all would look bright and outside the brain on a scan).

### Categorise based on criticality

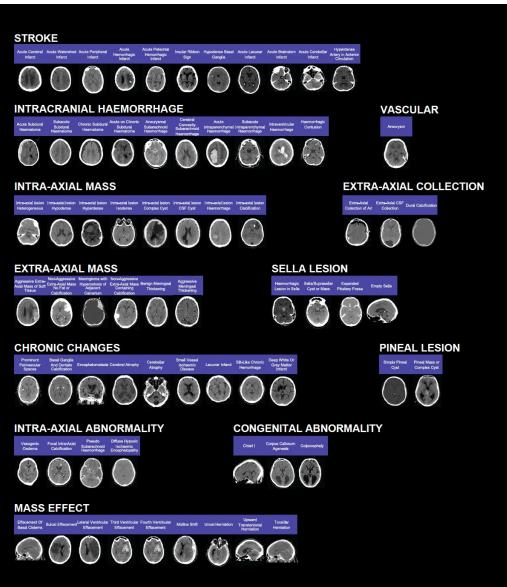
- Important step for worklist triage and driving workflow efficiencies.
- Critical findings such as ICH need to be alerted immediately;
   however chronic findings also need to be read.
- Customisable by care setting (e.g., ICU, trauma, general).

### Set thresholds

- Based on acceptable accuracy levels
- Customisable by care setting (e.g., ICU, trauma, general).

### 130 findings on non-contrast CT Brain (NCCTB) covered by Annalise Enterprise

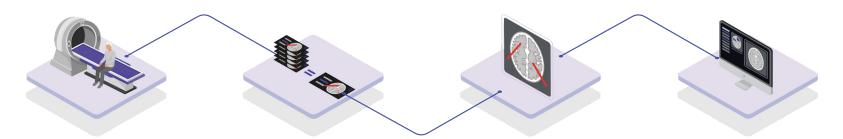
# **TUBES CLIPS & DEVICES FOREIGN BODIES** POST SURGICAL PROCEDURE **SKIN AND SCALP FRACTURE** PETROUS TEMPORAL BONES HYDROCEPHALUS **VENTRICLES** SKULL LESION **ORBITS ARTEFACT**



# ▶ Annalise Enterprise CTB: Trained on one of the world's largest radiologist labelled CTB datasets

△annalise.ai

A diverse set of non-contrast CT Brain scans, carefully labelled by consensus of fully-qualified radiologists with access to future and past context, such as MRI imaging and clinical reports.



# From a dataset of >229,000

unique non-contrast CT Brain studies. Including future and past context, MRI imaging and clinical reports.

# Labelled by at least 3 radiologists

who independently hand-labelled each dataset. More than **140** radiologists were involved in data labelling.

# Generating 269,000,000+

CTB labels with fully qualified radiologists.

# To bring you 130 findings

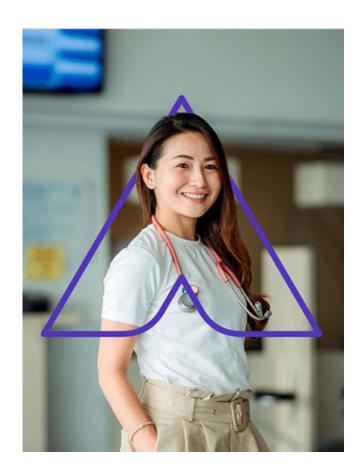
detected by Annalise Enterprise CTB.

Source: Data on file

# ▶ A proven track record in large-scale AI deployments

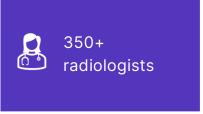
### △annalise.ai

In radiology chains with multiple RIS & PACS systems









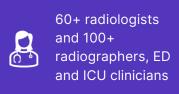












# > Start your Al journey in no time with Annalise.ai

### △annalise.ai

Managing the change beyond the successful IT implementation.



# Change management is an enterprise-wide core expertise

Ensuring enterprise-wide project engagement requires a carefully managed approach

Continuous and thorough change management support is

# KEY TO ROLLOUT SUCCESS especially in large-scale deployments, including:

### 1 Communication support

Articulate vision and strategy with company-wide announcements from leadership



### 2 Awareness-building support

Kick off video & webinar programs ahead of rollout to introduce Annalise.ai and its solutions



### 3 Educational support

Reference materials and intranet page for team education.



# Media coverage, industry experts

# △annalise.ai

#### FROST & SULLIVAN

#### "Multiple Anomaly Detection Solutions:

Care providers increasingly prefer solutions that can detect multiple anomalies in a single scan. which can reduce image reading time and minimize human error.

These solutions could be valuable in emergency trauma cases... such solutions are perceived to provide a higher return on investment. One example is Annalise.ai, which can detect over 120 abnormalities in a chest X-ray."

### **Annalise Goes 4/4**

"Annalise.ai's algorithm platform solved all four cases in a faceoff test between Al developers at ECR 2023."



"The Annalise.ai algorithm was the only one that detected pathology on all four cases."

Imaging Wire Newsletter, March 16 2023

Best New Technology Solution Radiology 2022



"...unless a niche vendor can offer something truly unique, why would a provider purchase, deploy and integrate a large number of point solutions when it could instead select a single comprehensive solution for a much smaller financial outlay, whilst avoiding the challenges of orchestrating multiple Al algorithms?" Premium Insight: A study in Validation. Aug 13, 2021



"...comprehensive solutions can help avoid missing findings, particularly those that are not part of the primary diagnosis. In doing so, missed diagnoses or misdiagnoses can be reduced enabling patients to be treated sooner and outcomes to be improved."

Signify Premium Insight: Annalise hoping to get comprehensively ahead. Nov 10, 2022



Video feature of implementation at NHS Grampian as part of the

### **Lungs Matter**

programme

in partnership with Respiratory **Futures and ITN Business** 



We're honoured to have been described as the

### "most outstanding"

of new AI companies by Prof. Erik R. Ranschaert, MD, PhD in Aunt Minnie Europe.



# ▶ Living up to our standards – impacting healthcare today

△annalise.ai

Partnering with our sibling companies harrison.ai and franklin.ai in the Harrison Foundation, we engage in partnerships to deploy our diagnostic solutions where they are needed most.

Bringing Annalise.ai to

### Thanh An, Vietnam





Thanh An island is located 70km east of Ho Chi Minh, and home to nearly 5,000 people. For medical treatment, people often have to travel to the mainland by boat, taking at least 1-2 hours. In November 2022, the Harrison Foundation partnered with ASIF and Fujifilm to deliver a portable X-ray machine equipped with Annalise CXR Edge for immediate AI decision-support helps improving health care within this community.





Bringing Annalise.ai to

### Goma, Democratic Republic of Congo





Goma, located in the northeast of the DRC, near the Rwandan border has a population of nearly 1 million people. In addition to being located in a geographically challenging region, bordered by the active volcano Mount Nviragongo, experiencing limnic eruptions, Goma has been the site of intermittent fighting for decades, with UN peacekeepers present. In March 2023, together with the Sonic Foundation, the Harrison Foundation is aiming to deploy Annalise Enterprise at Heal Africa Hospital in Goma.





# Thank You

△annalise.ai