



DrAid™ User Guide

Version 1.12.0.

Version	Update date	Updated content
Version 1.2.6	07/09/2020	Add AI prognosis of COVID-19 result (Normal, mild, severe, critical)
Version 1.4.0	22/09/2020	New features: Notification and Print Doctor decision report
Version 1.5.0	02/10/2020	New feature: share QR code/link
Version 1.10.0	12/01/2021	Update new UI/UX of DrAid WebApp
Version 1.12.0	10/03/2021	New features: 4 new tools for CT/MRI (Window preset, Ellipse, Rectagle, Intensity)

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CHAPTER 1

Product description

Overview

DrAid™, an AI assistant doctor researched and developed by VinBrain (an company funded by VinGroup), is the first AI product in Vietnam to assist doctors in diagnosis of diseases and abnormal findings based on chest X-ray images.

The DrAid™ system consists of 3 main parts: Artificial intelligence (AI) application, cloud computing platform, and ecosystem for mobile devices.

With a foundation of Artificial Intelligence through Computer Vision and Natural Language Processing, DrAid™ is trained based on a big data set of over 1.3 million PA chest X-ray images, 71,000 of which were labeled by ~ 50 experienced radiologists in Vietnam. The team has also used two world's biggest data sets about COVID-19 (Positive: 7,490 images, Negative: 155,065 images).

DrAid™ has been deployed in 63 hospitals and medical facilities, including Lung Hospitals, Vinmec International Hospitals, Hue Central Hospital, Hue University of Medicine and Pharmacy Hospital, etc. On December 23, 2020, DrAid™ was the only digital medical software to win the national award "Make in Vietnam 2020" in the "Excellent Digital Solution" category.

DrAid™ is capable of assisting doctors in the diagnosis of 19 abnormalities and diseases based on PA chest x-rays, including: *Abnormal finding suspepected tuberculosis, Pneumonia, Pneumothorax, Edema, Lung lesion, Pleural effusion, Atelectasis, Consolidation, Pulmonary scar, Pleural other, Mass, Nodule, Cavitation, Enlarged cadiomediastinum, Cadiomegaly, Fracture, Medical device, No findings*, and especially capable of detecting abnormal signs related to COVID-19 even in cases without symptoms or mild lung damages.

DrAid™'s ability to support patient prognosis and COVID-19 treatment is the result of the project "Research on application of artificial intelligence (AI) to use of chest X-ray images in support of COVID-19 diagnosis in Vietnam". This is a ministerial project jointly by VinBrain and the Electronic Health Administration of the Ministry of Health. The project was accepted with 100% consent by the Science and Technology Council of the Ministry of Health on August 18, 2020.

User classification and focus

There are 3 types of users in DrAid™ system:

- VB admin: This user is responsible for facilitating registrations of other users and operations in the system.
- Hospital admin: This user is responsible for overseeing all usage of a hospital in DrAid™ system, such as user management, securities and payment. Once a hospital is added to the system, an admin account will also be created.
- Doctor: This user will be using the core AI feature of DrAid™ to submit X-ray images and receive results from AI.

This document is designed to put focus on the 3rd type of user – Doctor – and give them a detailed instruction on how to work with DrAid™.

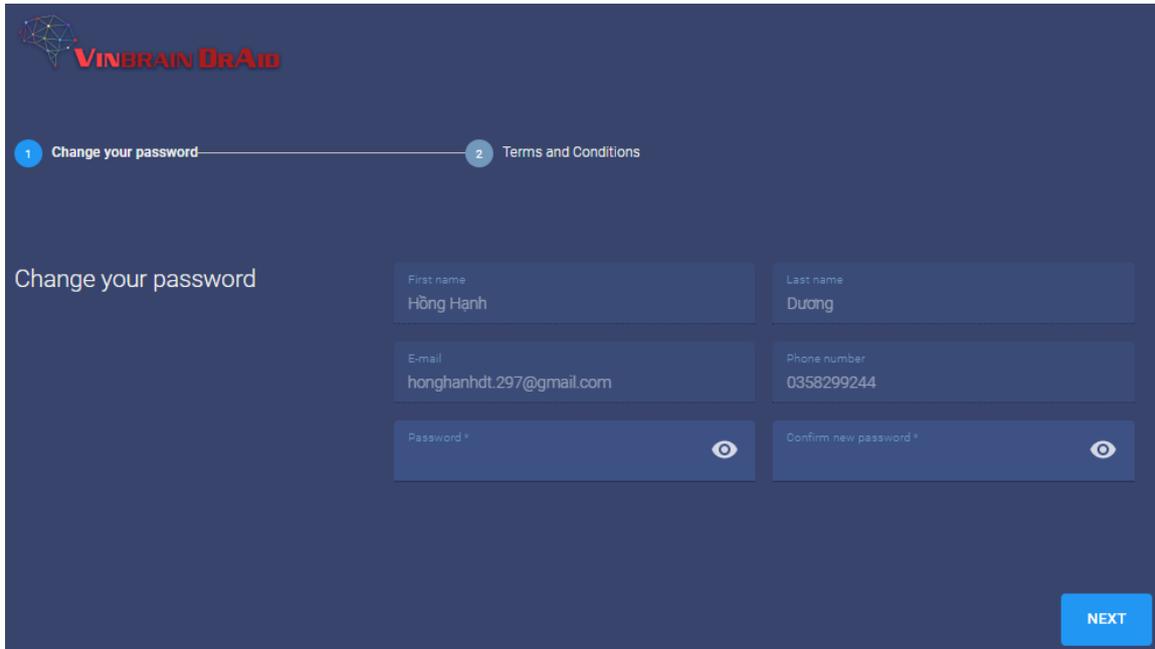
CHAPTER 2

Main features of DrAid™

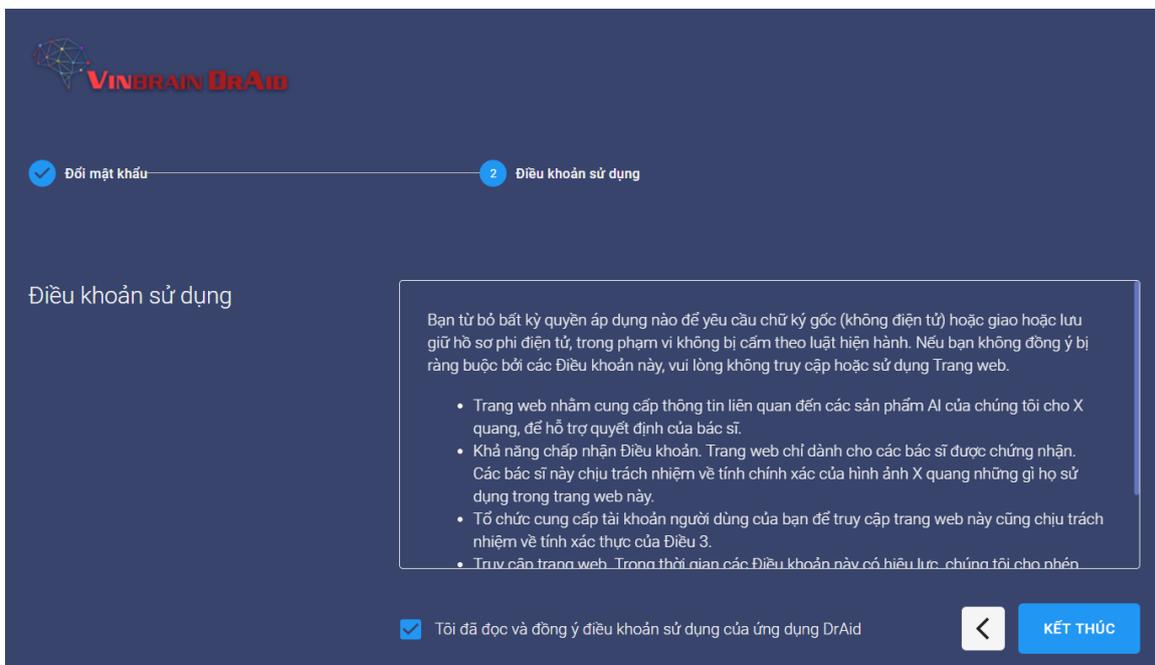
2.1. Register and login

As a doctor, you must register your information with DrAid™ before you can use this system.

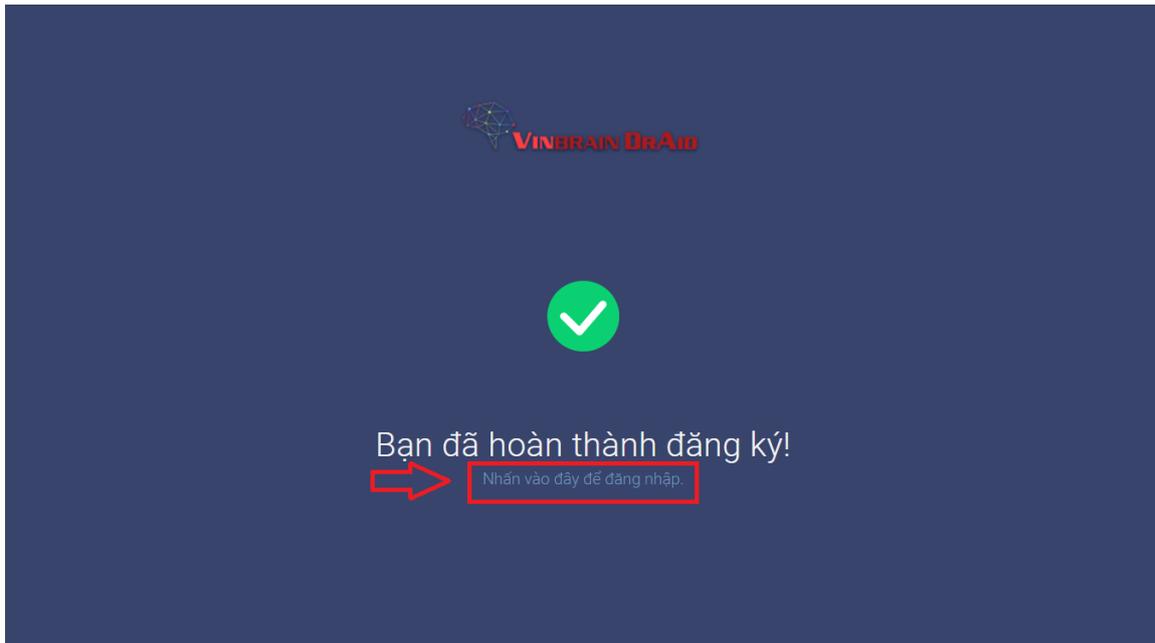
After receiving an email from the hospital administrator and clicking on a provided link, you will be directed to another page to change your password on DrAid™:



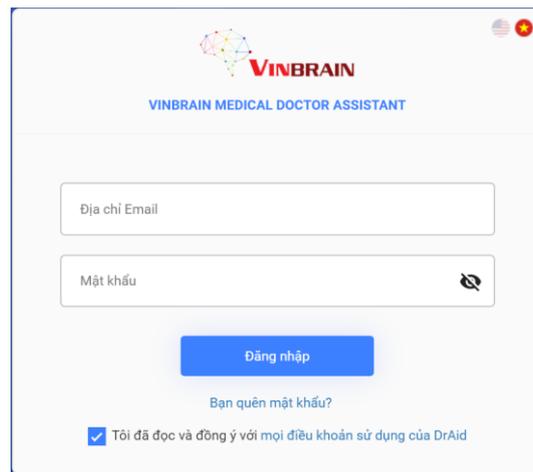
Next, the DrAid™ **Terms of Use** screen will pop up:



Tick the box to accept, and then click **[END]**, so you have completed the registration steps:

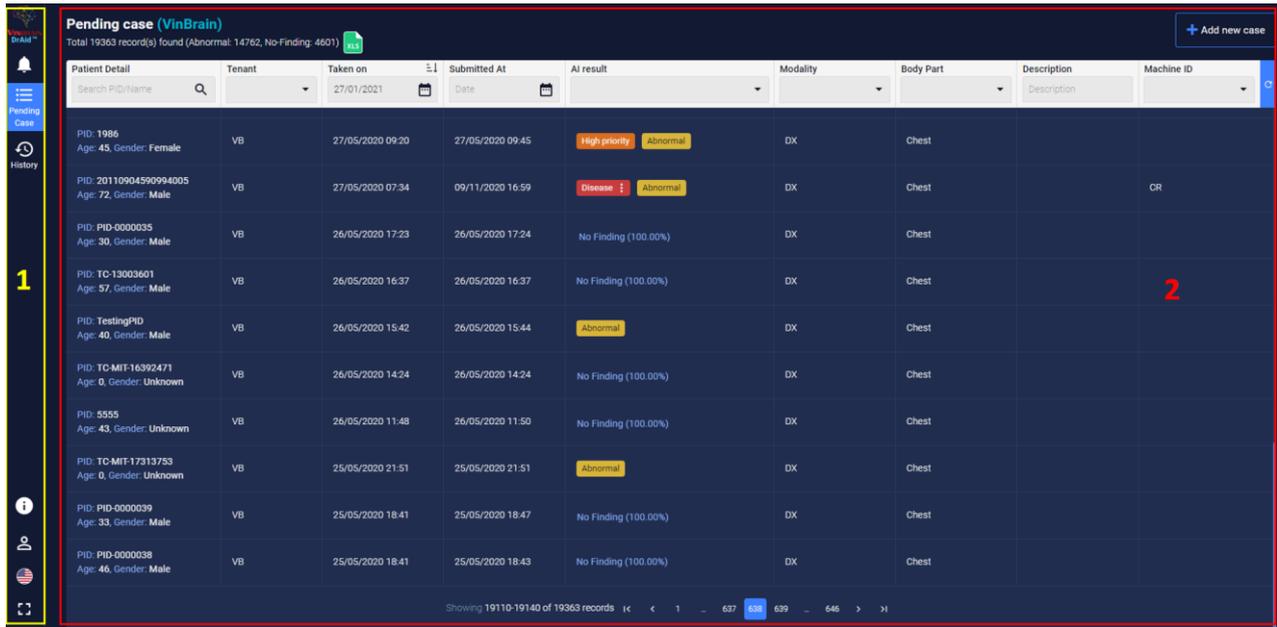


Click on the link circled in red as in the picture, and use the account information you have just created to log in:


NOTE:

- You can choose the language of the system by clicking on a flag in the upper right corner of the dialog box.
- Each hospital will have its own link to DrAid™ with the format: [https://www.\[Hospitalname\].draid.ai](https://www.[Hospitalname].draid.ai). You can access this link for next login.

After login, this is the home page of DrAid™



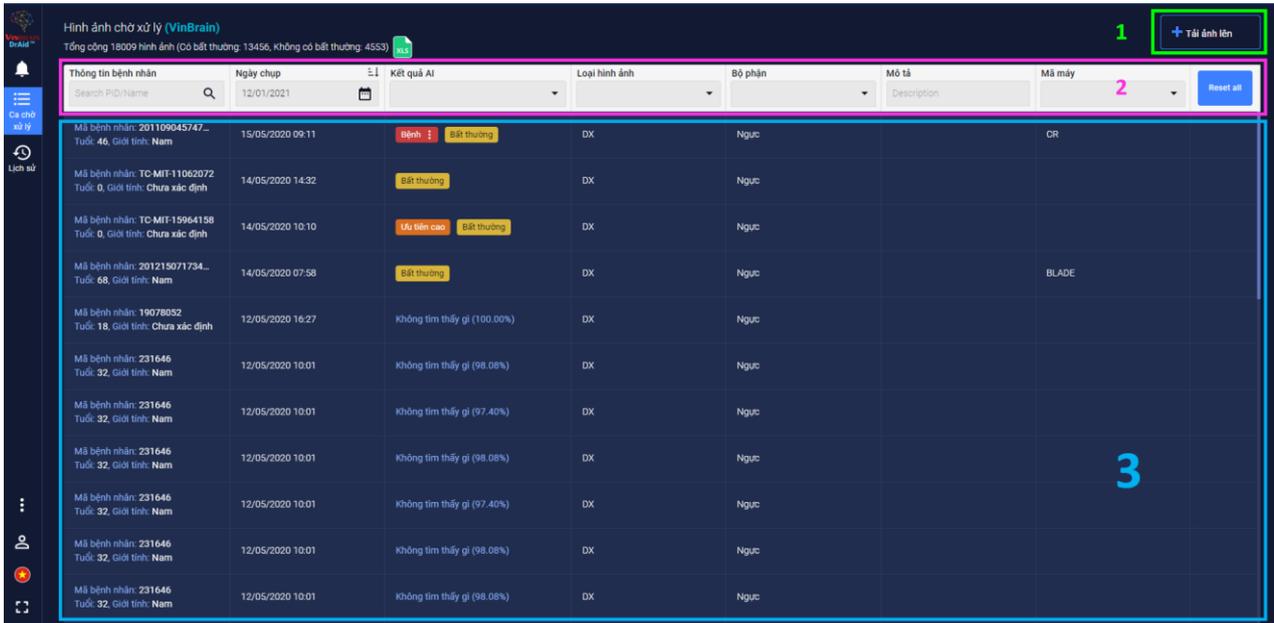
- **Area 1:** The menu bar, including main features of DrAid™

Button	Description
	<p>Notifications Menu</p> <p>When a new case is automatically uploaded by VB Onebox to the system, the notification bell button will display the number of new cases. When opening the notification, Doctor can choose the following types of images for timely processing</p>
	Pending case menu - where a list of new cases automatically and manual uploaded to the system are displayed
	History menu - where a list of cases with doctor conclusions are displayed
	Application version menu - where application updates and user guide are displayed
	User menu - where personal information of the user is displayed
	Language menu – with 2 language options: English and Vietnamese
	Full screen mode menu

- **Area 2:** Pending cases screen - which displays the images (X-ray, computed tomography (CT), magnetic resonance imaging (MRI)) that have yet to be processed by Doctor.

2.2. Pending case screen

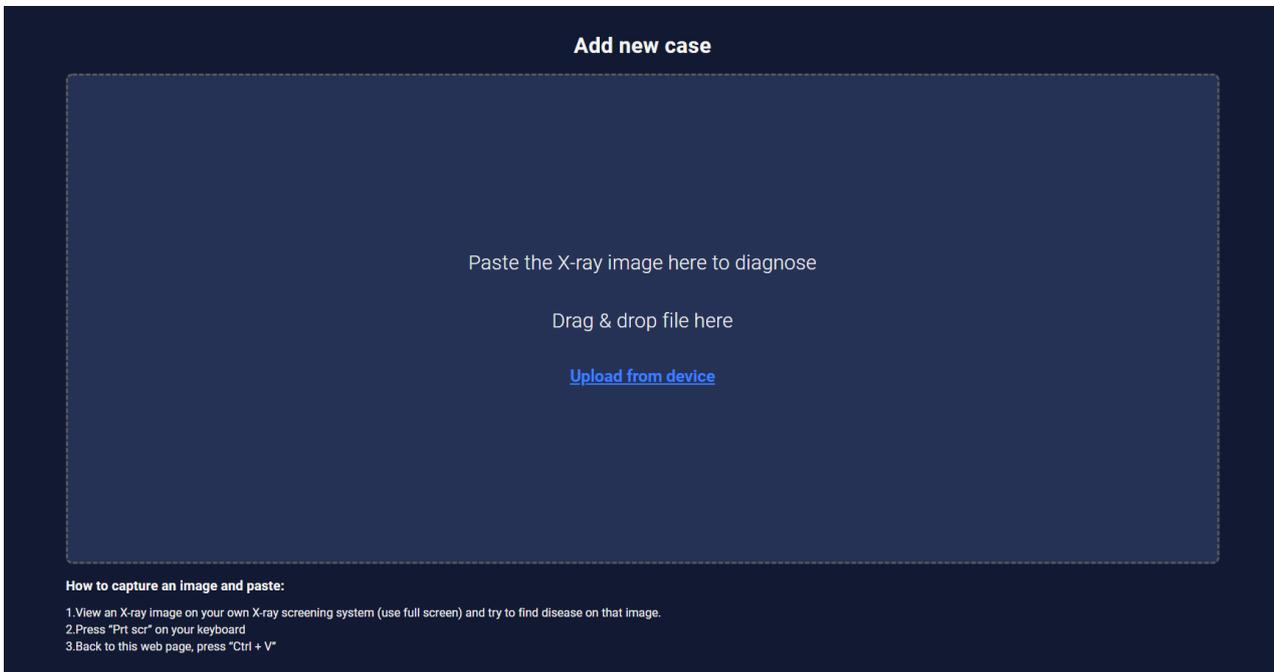
Right after login, the first page displayed is “Pending case”



The interface of this page includes:

- 1. Add new case button:** Doctor can manually upload images to receive AI results
- 2. Filter menu:** This area allows Doctor to easily search for unprocessed cases on demand
- 3. List of new cases:** This shows the cases that are automatically and manually uploaded to DrAid™

2.2.1. Manually upload images to get AI results



Instruction:

Step 1: Upload image to the system

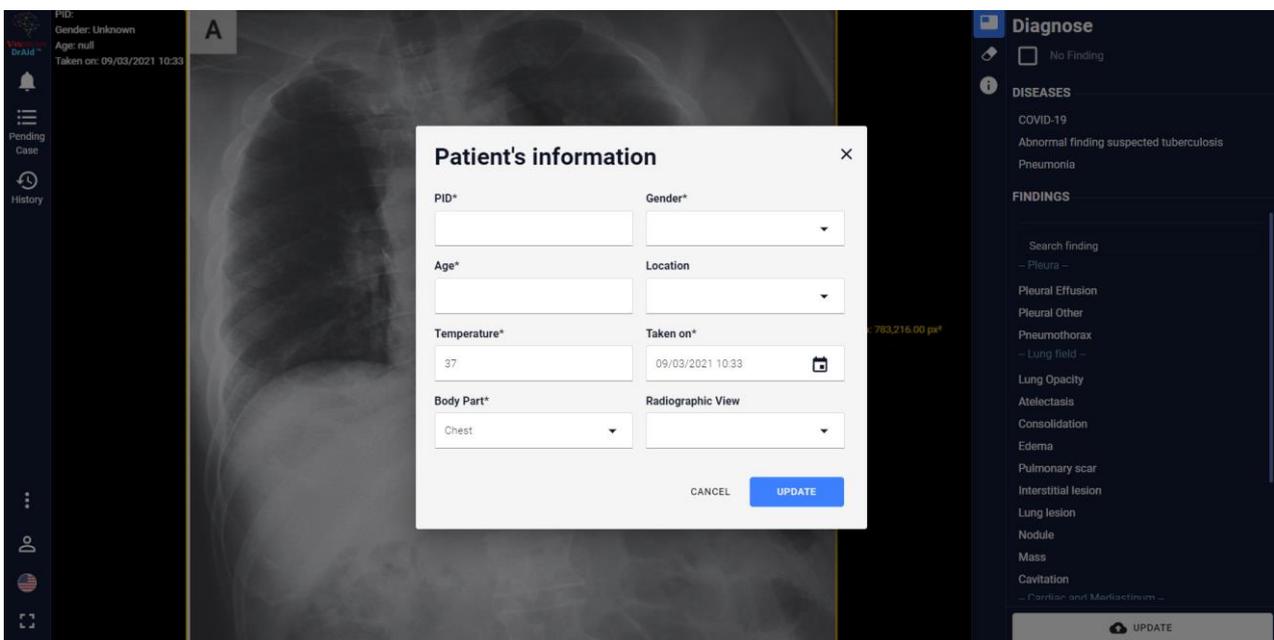
Doctor can manually upload images to the system in 3 ways:

- 1: Drag and drop image to the required area
- 2: Select "Upload from device"
- 3: Screenshot and paste images

NOTE:

- The X-ray image size must be 448 * 448 pixel or bigger.
- Patient's information on the X-ray image is automatically covered for privacy. As a radiologist, you need to do this manually if the system misses some details by drawing rectangles to cover patient's information that has been missed.

Step 2: Enter patient information

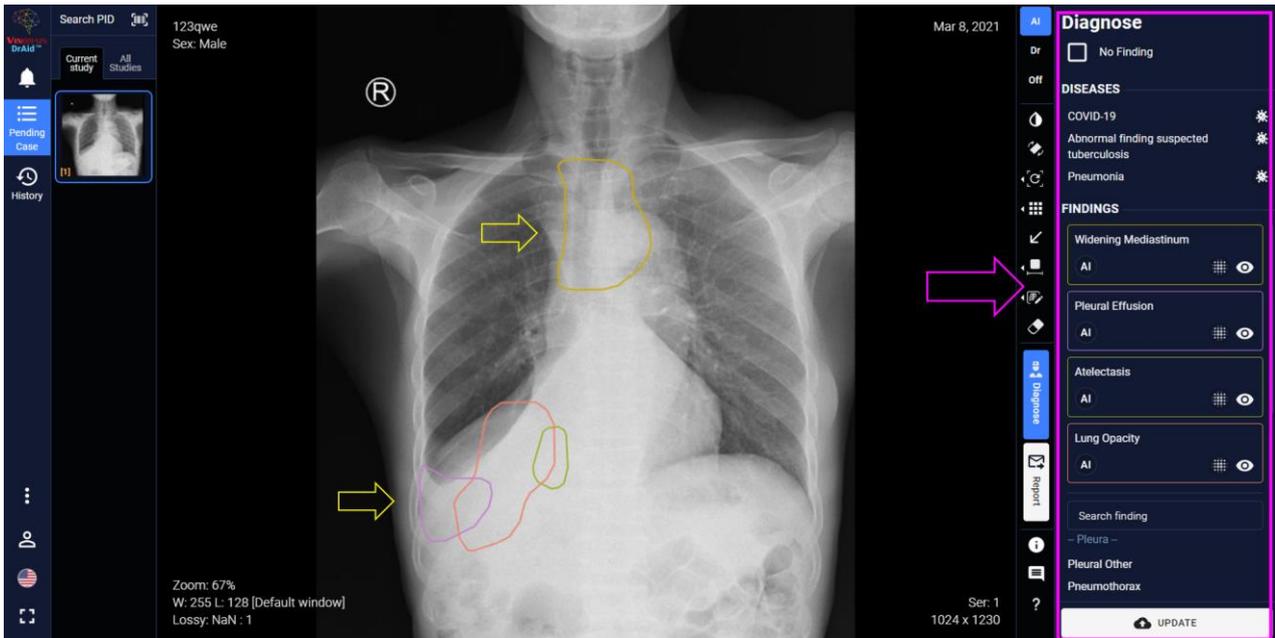


Information field	Compulsory	Optional	Note
Patient ID	X		
Gender	X		
Patient name	X		Depending on hospital to display this information
Age	X		
Location		X	
Temperature	X		The default temperature is 37 ° C
Scanning date	X		The date defaults to the current time
Body part	X		The default part is chest
Radiographic View		X	

Step 3: Get AI results

AI results include:

- Diseases/ findings' name are displayed in the area on the right side of the screen
- Borders and heat map on the X-ray image(s)



The area on the right shows the AI results in form of boxes with colored borders. In the image is the borders of the disease/finding with a corresponding color to the border of the disease/finding name box.

In each box of AI results, Doctor can click on two buttons in the lower right corner, and then system will show the AI-diagnosed border and heat map for that disease.

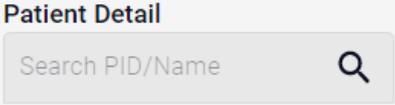
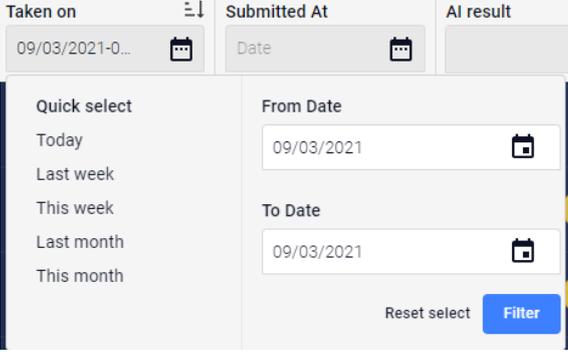
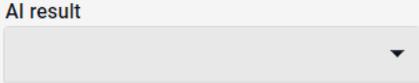
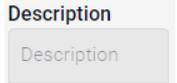
- 1 click to show the border of that finding
- Re-click to show the border of all findings detected by AI
- 1 click to turn on the heat map of that finding
- Re-click turn off the heat map

2.2.2. Open a new case from the Pending case screen

Pending case (VinBrain)									
Total 19363 record(s) found (Abnormal: 14762, No-Finding: 4601)									
Search PID/Name	Tenant	Taken on	Submitted AI	AI result	Modality	Body Part	Description	Machine ID	
PID: 1986 Age: 45, Gender: Female	VB	27/05/2020 09:20	27/05/2020 09:45	High priority Abnormal	DX	Chest			
PID: 20110904590994005 Age: 72, Gender: Male	VB	27/05/2020 07:34	09/11/2020 16:59	Disease Abnormal	DX	Chest		CR	
PID: PID-0000035 Age: 30, Gender: Male	VB	26/05/2020 17:23	26/05/2020 17:24	No Finding (100.00%)	DX	Chest			
PID: TC-13003601 Age: 57, Gender: Male	VB	26/05/2020 16:37	26/05/2020 16:37	No Finding (100.00%)	DX	Chest			
PID: TestingPID Age: 40, Gender: Male	VB	26/05/2020 15:42	26/05/2020 15:44	Abnormal	DX	Chest			
PID: TC-MIT-16392471 Age: 0, Gender: Unknown	VB	26/05/2020 14:24	26/05/2020 14:24	No Finding (100.00%)	DX	Chest			
PID: 5555 Age: 43, Gender: Unknown	VB	26/05/2020 11:48	26/05/2020 11:50	No Finding (100.00%)	DX	Chest			
PID: TC-MIT-17313753 Age: 0, Gender: Unknown	VB	25/05/2020 21:51	25/05/2020 21:51	Abnormal	DX	Chest			
PID: PID-0000039 Age: 33, Gender: Male	VB	25/05/2020 18:41	25/05/2020 18:47	No Finding (100.00%)	DX	Chest			
PID: PID-0000038 Age: 46, Gender: Male	VB	25/05/2020 18:41	25/05/2020 18:43	No Finding (100.00%)	DX	Chest			

List of new cases from the "Pending case" screen

Information on the Pending case screen:

Information field	Content	Corresponding filter	Note
Patient Information	Includes: - PID - Patient name - Age - Gender	Patient Detail  Search for PID and patient name by typing the information and pressing enter to search	"Patient name" is customized to display in some particular hospitals.
Taken on	This is the time when the scanning is performed	 This filter consists of 2 parts: - Sort information in chronological order (new -> old, old -> new). Click on this button  to order the information - Filter scanning date + Quick select + Enter date: from the date ... to date	The default taken-on date is filtered as "Today" so that Doctor can easily keep track of new cases within a day
AI result	Only PA chest x-ray cases of over-16-year-old patients will have AI's prediction. The AI results are divided into 3 groups: + Disease: include COVID-19, Abnormal finding suspected tuberculosis, Pneumonia + High priority: include Pneumothorax, Edema + Abnormal: All other abnormal findings	AI result  Doctor can filter cases according to 19 AI-predicted abnormalities.	For Disease group, doctors/ technicians can fill out the clinical (epidemical) information for that case.
Modalities	Include: - X-rays (DX, DR, CR) - Computed tomography (CT) - Magnetic resonance imaging (MRI)	Doctor can filter cases by modality from the drop-down list. 	
Body part		Doctor can filter cases by body part from the drop-down list. 	
Description	Displays descriptions of the case retrieved from DICOM file in the machine.	Doctor can filter cases by description by typing in the information and pressing enter. 	
Machine ID		Doctor can filter cases by machine ID from the drop-down list. 	

After using necessary filters to find a case, Doctors use single click on a case to open it

NOTE: Doctors/technicians can fill out the epidemiological/clinical information of the disease (COVID-19, Abnormal finding suspected tuberculosis, Pneumonia) from “Pending case” screen.

Instruction:

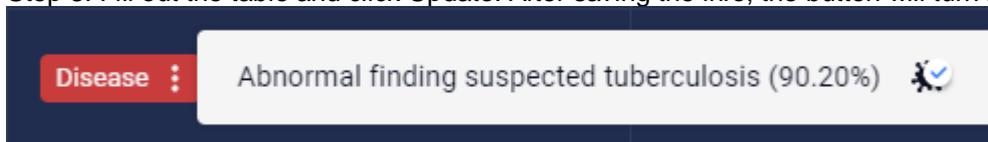
- Step 1: Click on the 3 dots -> Show the diseases predicted by AI



- Step 2: Click on the button  to open the clinical/epidemiological information table for the respective disease

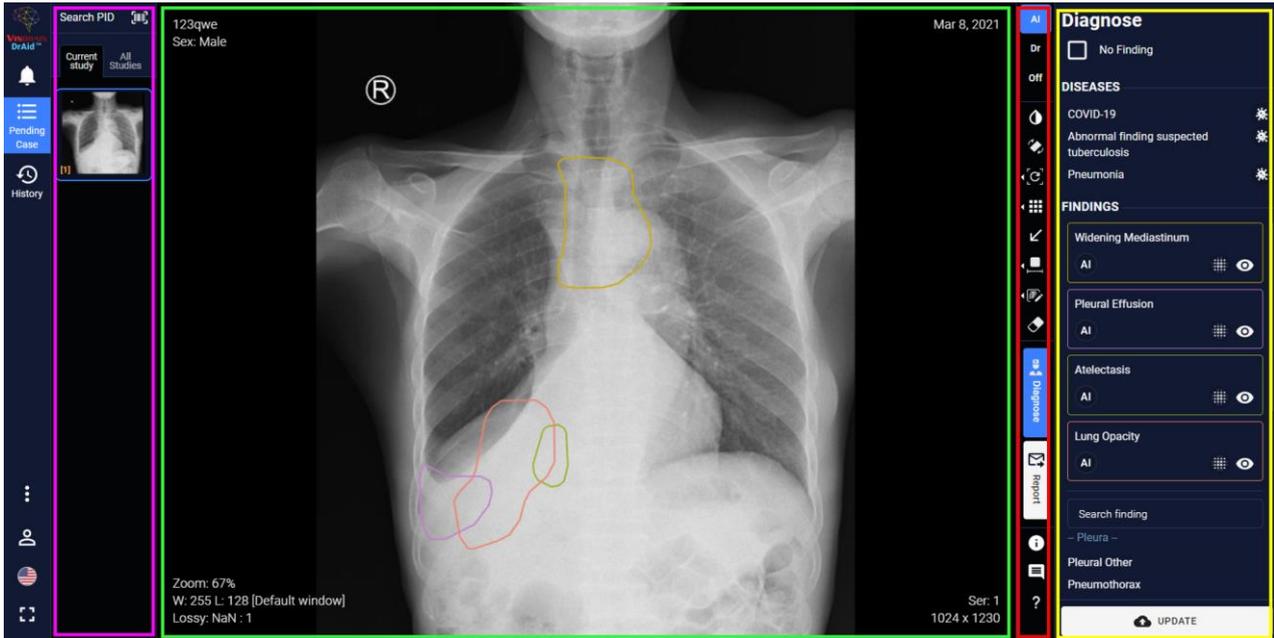
COVID-19 symptoms	Tuberculosis symptoms	Pneumonia symptoms
<p>Temperature * 37</p> <p>Date of illness </p> <p>Epidemiology *</p> <p><input type="radio"/> No epidemiological information was collected</p> <p><input type="radio"/> There is no epidemiology</p> <p><input type="radio"/> Have epidemiology</p> <p><input type="checkbox"/> Contact with COVID-19 patient(s)</p> <p><input type="checkbox"/> Live, come from or pass through where COVID-19 is spreading</p> <p>Symptoms *</p> <p><input type="radio"/> No symptom information was collected</p> <p><input type="radio"/> There is no symptom</p> <p><input type="radio"/> Have symptoms</p> <p><input type="checkbox"/> Cough</p> <p><input type="checkbox"/> Tiredness</p> <p><input type="checkbox"/> Loss of smell</p> <p><input type="checkbox"/> Muscle Aches</p> <p><input type="checkbox"/> Shortness of breath</p> <p><input type="checkbox"/> Diarrhea</p> <p><input type="checkbox"/> Sore Throat</p> <p><input type="checkbox"/> Nausea</p> <p>PCR Test</p> <p>Date of Sampling </p> <p>Date of result </p> <p>PCR test result </p> <p>UPDATE</p>	<p>Clinical info</p> <p>General symptoms</p> <p><input type="checkbox"/> Low-grade fever in late afternoon</p> <p><input type="checkbox"/> Night sweats</p> <p><input type="checkbox"/> Loss of appetite, fatigue, unintentional weight loss</p> <p>Respiratory symptoms</p> <p><input type="checkbox"/> Coughing that lasts more than 2 weeks (dry cough, cough with sputum, haemoptysis)</p> <p><input type="checkbox"/> Chest pain</p> <p><input type="checkbox"/> Shortness of breath</p> <p>Physical examination</p> <p><input type="checkbox"/> Crackles</p> <p>Risk factors</p> <p><input type="checkbox"/> HIV infection</p> <p><input type="checkbox"/> Directly exposed with infected people</p> <p><input type="checkbox"/> Having chronic diseases: gastroduodenal ulcer, diabetes, chronic kidney failure, ...</p> <p><input type="checkbox"/> Addict to drug, alcohol, tobacco, and pipe</p> <p><input type="checkbox"/> Use long-term immunosuppressants such as corticosteroids, cancer treatment chemicals, ...</p> <p>AFB test</p> <p>Date of Sampling </p> <p>Date of result </p> <p>AFB test result </p> <p>Xpert MTB/RIF test</p> <p>Date of Sampling </p> <p>Date of result </p> <p>Xpert MTB/RIF test result </p> <p>UPDATE</p>	<p>General symptoms</p> <p><input type="checkbox"/> Fever, chills</p> <p><input type="checkbox"/> Fatigue</p> <p>Respiratory symptoms</p> <p><input type="checkbox"/> Cough, usually brings up sputum</p> <p><input type="checkbox"/> Pleuritic chest pain</p> <p><input type="checkbox"/> Shortness of breath</p> <p>Risk factor</p> <p><input type="checkbox"/> Immunocompromised patients</p> <p>Blood test</p> <p>Date of sampling </p> <p>Date of result </p> <p><input type="checkbox"/> Increase leukocytes, CRP, procalcitonin...</p> <p>Enter note here</p> <p>Respiratory secretions test</p> <p>Date of sampling </p> <p>Date of result </p> <p><input type="checkbox"/> Find the bacteria, virus, fungi...</p> <p>Enter note here</p> <p>UPDATE</p>

- Step 3: Fill out the table and click Update. After saving the info, the button will turn into a tick



When opening the case that already have the clinical/epidemiological information, Doctor will see the similar icon next to the disease name, which you can click on it to open the completed symptom table.

2.3. See AI results in case details screen



The interface of the detailed case screen includes:

2.3.1. Area 1:

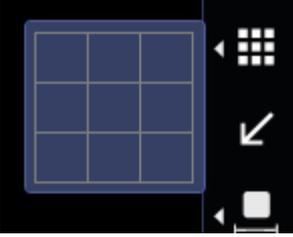
- Box "Find PID": To help Doctor quickly find PIDs without returning to "Pending case" screen.
- "Current Studies" and "All studies" areas: Here, Doctor uses the mouse to click on preview image (thumbnail) of the series or drag and drop the series into the image area to manipulate the selected series.

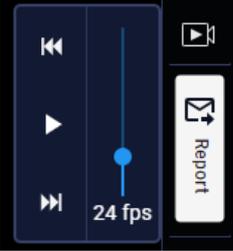
2.3.2. Area 2: Image area

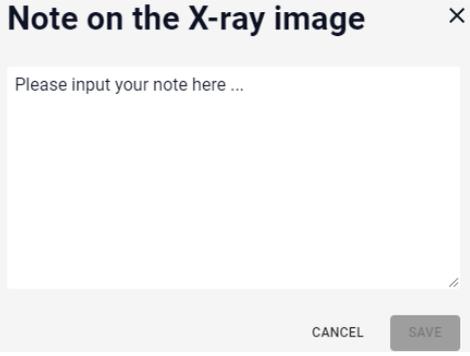
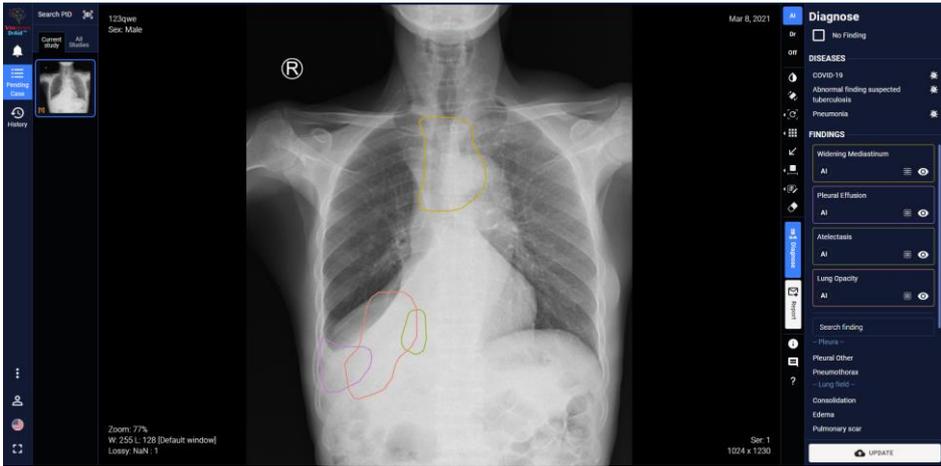
Patient information and image parameters are displayed in the four corners of the image

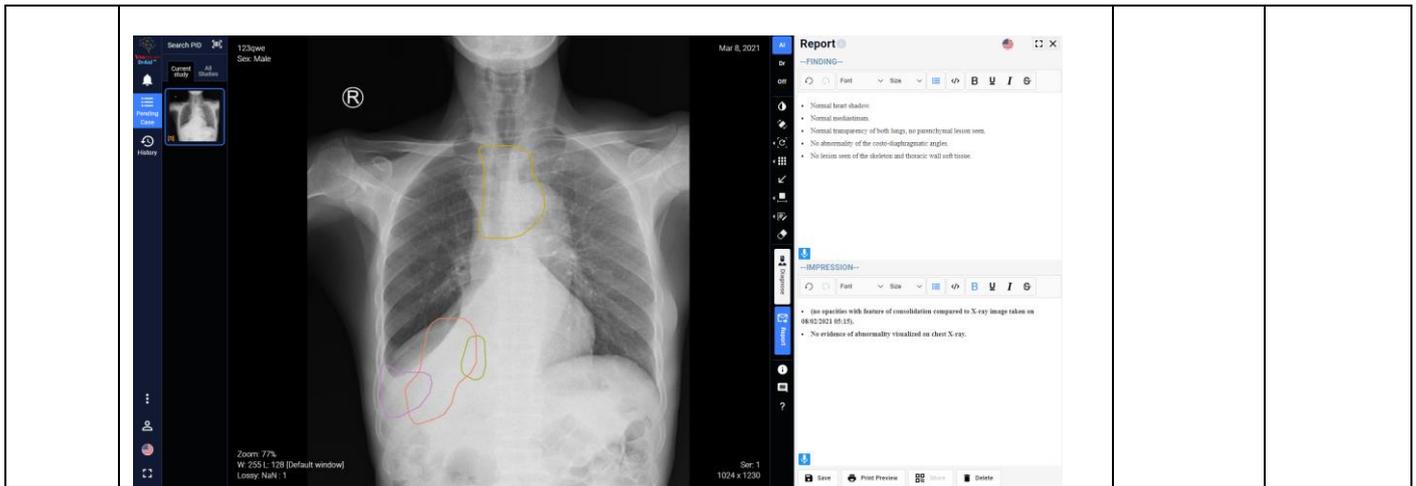
2.3.3. Area 3: Toolbar

#	Description	Available with X-ray images	Available with CT/ MRI images
	The mode shows AI's border on the image	X	
	The mode shows Doctor's border on the image	X	
	The mode of original image	X	
	Color invert After clicking on this button, image is displayed in black and white as opposed to the original images	X	X
	Image rotation Click this button, then hold the left mouse button to rotate the image	X	X
	Reset: - Reset contrast - Reset image rotation	X	X

	<ul style="list-style-type: none"> - Reset zoom  - Reset all  		
	<p>Layout Press the left mouse button on the icon layout, then select the desired layout in the expanded menu.</p> 	X	X
	<p>Annotation Use the mouse to create an arrow that points to the location of abnormal finding, then enter caption for it</p>	X	X
	<p>Ruler Click on the ruler button, then click to locate the two points to be measured. Measurement results will be displayed in mm round to 2 decimal places.</p> <p>Note: This function is only available for DICOM format images that are automatically uploaded from the machine.</p>	X	X
	<p>Bidirectional ruler Click this button, then customize two dimensions of the ruler to measure length and width. Measurement results will be displayed in mm round to 2 decimal places.</p> <p>Note: This function is only available for DICOM format images that are automatically uploaded from the machine.</p>	X	X
	<p>Heart ruler Click on this button, then customize the heart ruler's guides. The system will calculate the cardiothoracic ratio</p>	X	
	<p>Angle Click on this button then use the mouse to determine the angle to be measured, the original parameters are displayed in degree, round to 2 decimal places</p>	X	X
	<p>Pen Click on this button, then use the mouse for drawing border</p>		X
	<p>Magnify Select this button, then click on the display box, then move the mouse to a certain position on the image; a small square will display the magnification for the selected area</p>	X	X
	<p>Vertical flip Click on this button then the image will be displayed as symmetrical to the original image across the vertical axis.</p>	X	X
	<p>Horizontal flip Click on this button then the image will be displayed as symmetrical to the original image across the horizontal axis.</p>	X	X

	<p>Text censor</p> <p>Use this function in case you want to cover information on an image (e.g patient information). When this function is selected, use your mouse to draw a black box of any size on the image</p>	X	X
	<p>Download</p> <p>Select the viewport where Doctor wants to download images, then press this button. The images being viewed within the frame will be saved as a .jpg image.</p>	X	X
	<p>Full screen</p> <p>When this button is clicked on, full screen mode is enabled, with only photos and the toolbar displayed</p>	X	X
	<p>Eraser tool</p> <p>Use to delete the measurements and annotations made on the image.</p>	X	X
	<p>Cine</p> <p>When you click on the "Play" button, the image in the series that is currently displayed will be automatically scrolled</p> <p>The default scroll speed is 24 frames per second (24 fps). Scroll speed can be adjusted by dragging the toolbar in the expanded scroll menu.</p> 		X
	<p>Ellipse</p> <p>Use this button to draw an ellipse and receive statistics of area, mean (HU) and Std Dev</p>		X
	<p>Rectangle</p> <p>Use this button to draw a rectangle and receive statistics of area, mean (HU) and Std Dev</p>		X
	<p>Window preset</p> <p>Use to adjust the brightness/contrast for specific area</p> 		X
	<p>Intensity</p> <p>Use this button check the location (X,Y) and radiodensity (in HU) at a point</p>		X

	<p>View patient information</p> <p>Click on this button and a table containing patient information will be displayed.</p>	X	X
	<p>Note Use to save notes if needed.</p> <p>Note on the X-ray image</p> 	X	X
	<p>Mouse tooltips:</p> <p>Use the mouse to adjust image's properties:</p> <ul style="list-style-type: none"> • Hold down the left mouse button -> Change brightness/contrast • Hold down the right mouse button -> Zoom in/Zoom out • Hold down the mouse wheel -> Move the image in the image area • Scroll the mouse wheel -> Scroll images in a series (for CT/MRI) <p>Heart ruler:</p> <ul style="list-style-type: none"> • Left mouse button -> Change the position of the lines to get cardiothoracic ratio results • Right mouse button -> Rotate heart ruler 	X	X
	<p>Diagnose tab</p> <p>Click on this tab to open/close the AI results area</p> <p>In the AI results area, Doctor selects a disease and then clicks on [Update] to open the medical report area demonstrating the selected information</p> 	X	
	<p>Report tab</p> <p>Click on this button to open/close the report area.</p> <p>You can compose a medical report yourself by opening this area and editing the content.</p>	X	X



2.3.4. Area 4: Diagnose and report area

2.3.4.1. AI results area (or diagnose area)

- Only PA chest X-ray of a patient over 16 years old will have AI results
 - This area shows a list of diseases and abnormal findings predicted by AI and classified into 3 groups

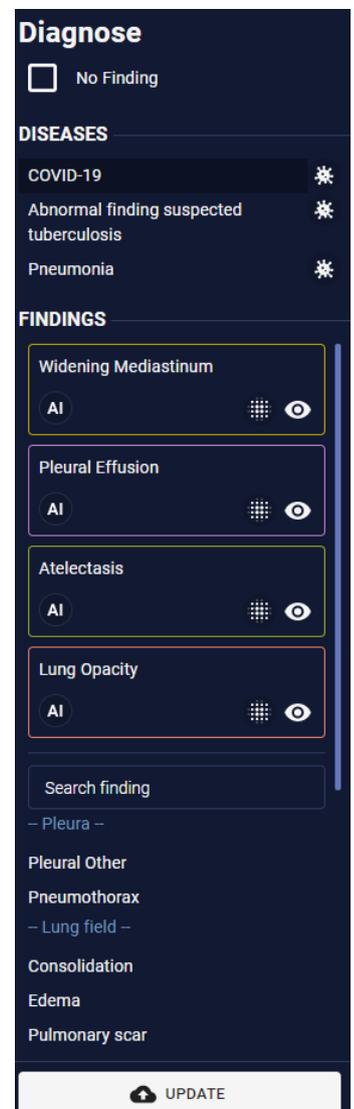
- No finding
- Diseases (COVID-19, abnormal finding suspected tuberculosis, pneumonia)

NOTE:

Doctors/technicians can fill in the epidemiological clinical information for the disease by selecting the icon

Particularly for COVID-19, the AI result will be calculated and updated again after the epidemiological information is available.

- Abnormal findings, including those arranged in order:
 - Pleura
 - Pleural effusion
 - Pneumothorax
 - Pleural other
 - Lung field
 - Lung Opacity
 - Atelectasis
 - Consolidation
 - Edema
 - Pulmonary scar
 - Interstitial lesion
 - Lung Lesion
 - Mass
 - Nodule
 - Cavitation
 - Cardiac and mediastinum
 - Enlarged cardiomeastinum
 - Cardiomegaly
 - Other
 - Fracture
 - Medical device
 - Subdiaphragmatic free gas
 - Other findings



- Any disease/abnormality that has been predicted by AI will have its name highlighted in the color box (displayed at the top of the list of findings) with the AI symbol and AI confidence score

- The AI will also predict the border and heat maps for diseases/abnormalities. Click on the corresponding button to display the border or heat map on the image

AI tag with confidence score

- 1 click to show the border of that finding
- Re-click to show the border of all findings detected by AI
- 1 click to turn on the heat map of that finding
- Re-click turn off the heat map

- This area can be closed to expand the image area by pressing again on the Diagnose tab

2.3.4.2. Report area

- When you select the tab "Report", the Report area will open with the interface as shown to the side, including:
 + Finding and impression area: For doctor to enter/amend the content of the medical report

+ Toolbar: Text editing tools



+ Language button:



The default content of the Report will be changed according to the selected language of WebApp

+ Voice input button (smart assistant) -> helps Doctor optimize input time by turning voice into text



+ Button to expand reports on the screen



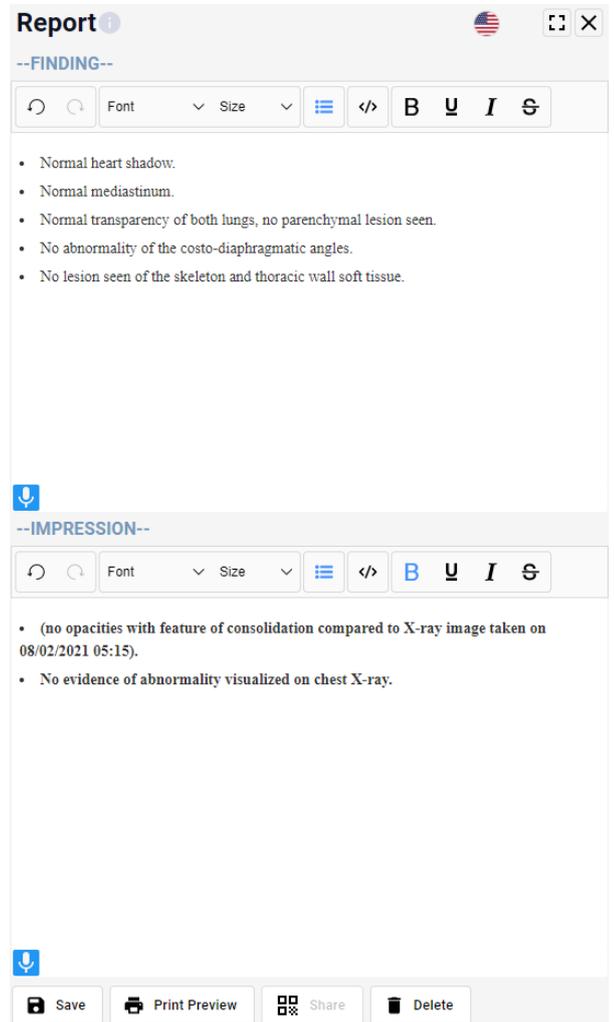
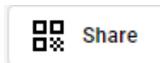
+ Button to close report area



+ Button to save reports



+ Button to share reports in form of link or QR code

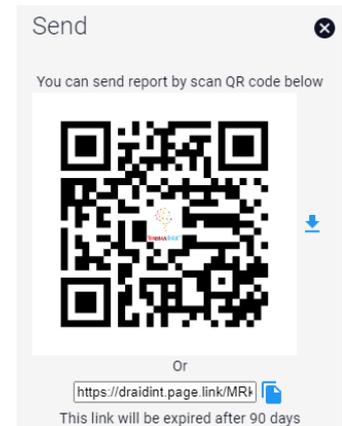


After the [Share] button is clicked on, the QR code and the link of the medical report will be displayed.

With QR code, users can use the DrAid™ application on their phone to check the medical report.

With the link, users can open it on the computer or phone to check the medical report.

The shared medical report includes images, border(s) by Doctor, and the details of the report.



2.4. Create Medical Report on DrAid™

2.4.1. For PA chest X-rays of a patient over 16 years old

For this type of image, Doctor will get AI results

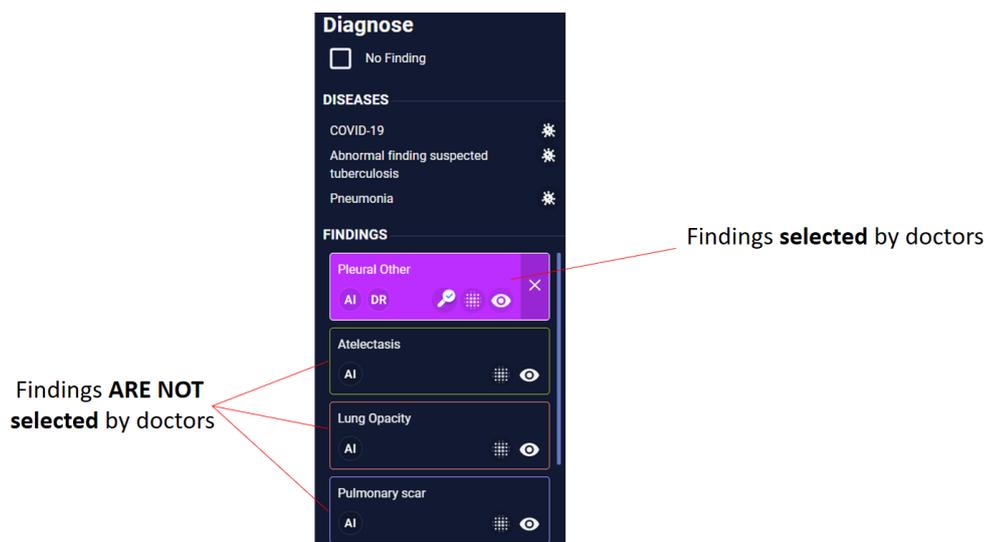
There are 2 ways to create Medical Reports on DrAid™

- **1:** Select a disease from the AI list, draw border for the disease(s)/abnormal finding(s), and click [Update]. Contents of Medical Reports will be exported accordingly
- **2:** Doctor manually enters Medical Report by Report tab

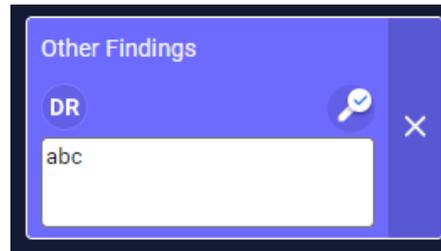
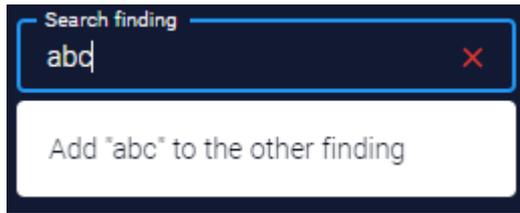
1: Create a Medical Report by selecting a disease from the AI list

Instruction:

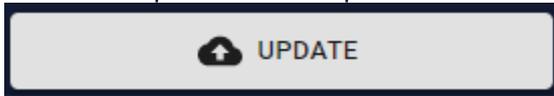
- **Step 1:** After opening a case from Pending case, Diagnose area will show up. **Here, choose the disease(s)/abnormal findings from the list and draw border**
 - ➔ When Doctor selects the disease/finding, the box will be colored and the DR symbol will be displayed, and the pen tool will be activated for Doctor to draw border. To deselect, click the x



- Doctor can look for a finding in [Search finding] box. In case the finding is not in the current list, the system will save it as **other finding**



- **Step 2:** Confirm
 Doctor presses the [Update] button at the bottom of the list to confirm and save the finding and its border in step 1. Then the report area will be opened with the corresponding updated content.



- **Step 3:** Edit and save Medical Report
 After editing, click [Save]. The case will be moved to the History screen.

2: Create Medical Report directly in the Report area

Instruction:

- **Step 1:** After opening a case from pending case, diagnose area will show up. Then click the Report tab in the toolbar to open the report area.
Step 2: Edit and save Medical Report. After editing, click [Save]. The case will be moved to the History screen.

2.4.2. For non-chest X-rays

Non-chest X-ray cases don't have AI results. The reporting area will display suggested content according to the template of that part body.

After that, Doctor edits and saves the Medical report.

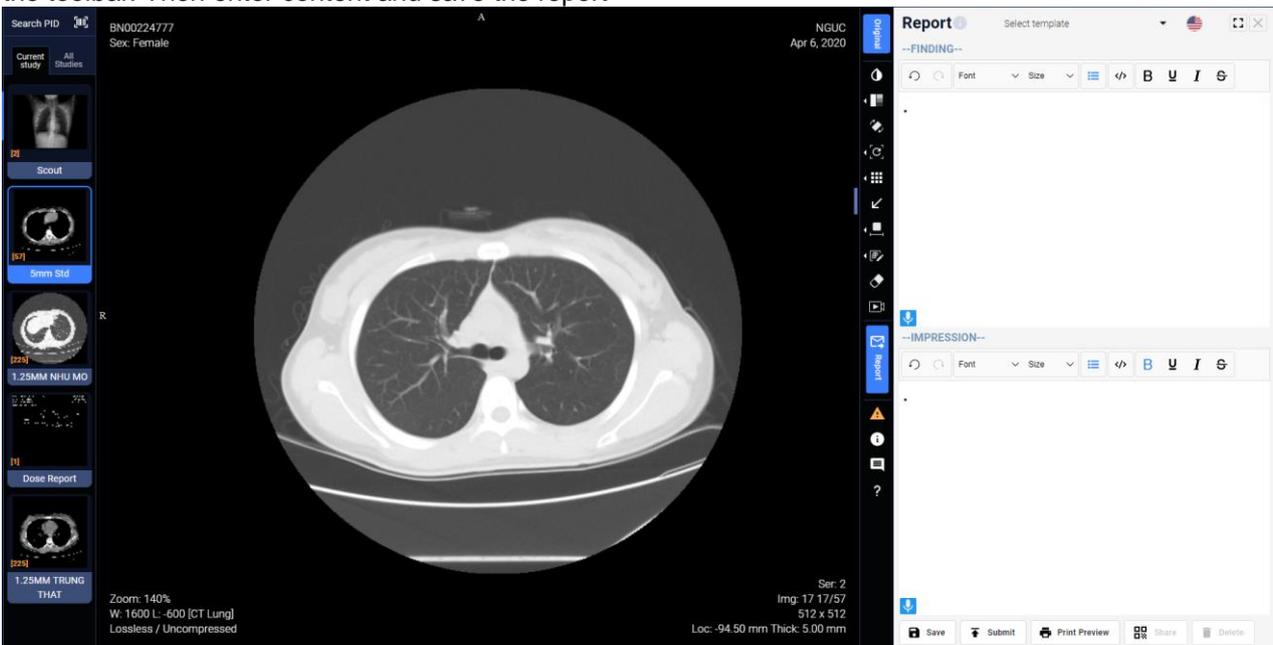


2.4.3. For CT - MRI images

CT - MRI cases don't have AI results. When a CT MRI case is opened, the reporting area will be hidden to expand the image area



When Doctor wants to create a Medical Report, he opens the report area by clicking the [Report] button on the toolbar. Then enter content and save the report



2.5. History screen

The History screen mostly consists of information fields and filters similar to the Pending images screen. Here, Doctor can review cases with saved medical reports.

Patient Detail	Tenant	Taken on	Submitted By	Submitted At	Doctor's Decision	Symptoms	Modality	Body Part
PID: 20210308-01 Age: 44, Gender: Male	VB	08/03/2021 16:19	v.namng	08/03/2021 16:20	No Finding		DX	Chest
PID: a Age: 21, Gender: Female	VB	04/03/2021 17:55	v.hienmai	05/03/2021 11:27	No Finding		DX	Chest
PID: linh27 Age: 80, Gender: Unknown	VB	01/03/2021 15:30	vinbrain.test	04/03/2021 14:53	Pneumonia, Lung Opacity, Consolidation...		DX	Chest
PID: 98765 Age: 55, Gender: Male	VB	02/03/2021 14:12	v.bacphung	02/03/2021 14:13	No Finding		DX	Chest
PID: linh26 Age: 80, Gender: Unknown	VB	01/03/2021 15:29	v.linhng	01/03/2021 17:04	No Finding		DX	Chest
PID: linh7 Age: 80, Gender: Unknown	VB	24/02/2021 17:50	v.linhng	24/02/2021 17:51	No Finding		DX	Chest
PID: 123 Age: 23, Gender: Unknown	VB	27/02/2021 11:39	v.thaihuynh	27/02/2021 13:53	No Finding		DX	Chest
PID: hanh Age: 33, Gender: Female	VB	25/02/2021 17:06	v.hienmai	25/02/2021 17:19	No Finding, Fracture		DX	Chest
PID: hien1 Age: 80, Gender: Unknown	VB	25/02/2021 13:57	v.hienmai	25/02/2021 15:12	No Finding		DX	Chest
PID: TONG T XUAN 43T	VB						DX	Chest

The History screen includes cases with saved medical reports

Information in the history table:

Information field	Content	Corresponding filter	Note
Patient Information	Include: - PID - Patient name - Age - Gender	Search for PID and patient name by typing the information and pressing enter to search	"Patient name" is customized to display in some particular hospitals.
Taken on	This is the time when scanning is performed	This filter consists of 2 parts: - Sort information in chronological order (new -> old, old -> new). Click on this button to order information - Filter scanning date + Quick select + Enter date: from the date ... to date	
Submitted by	Displays information of the doctor who made conclusions and created medical reports	Doctor can fill out information and press enter to search for the case	The default History page will display cases with medical reports created by the logged in account
Submitted at	Displays information about when medical reports of this case are saved	Doctor can filter cases by time, as with the [Taken on] column.	
Doctor's decision	Displays disease/abnormality options from the list of AI that the doctor has selected	Doctor can filter cases by disease/abnormality.	
Symptom	If the case is filled with clinical and epidemiological information => system displays symbol		

	If the case has notes => system displays notation symbol 		
Modalities	Include: <ul style="list-style-type: none"> - X-rays (DX, DR, CR) - Computed tomography (CT) - Magnetic resonance imaging (MRI) 	Doctor can filter cases by image type from the drop-down list.	
Body part	Displays information about the body part retrieved from the DICOM file in the machine or information when Doctor manually uploads the image	Doctor can filter cases by body part from the drop-down list.	

2.6. Edit personal information and log out

To view/edit personal information, Doctor can choose the icon  on the menu bar. Then the screen will display two options:

- Profile: Click to view/edit personal information

Profile ×

Information

Email

Hospital

Account status: Activated

First name * Last name * EDIT

Phone number * Unit

Password CHANGE PASSWORD

- Log out: To log out of the system

2.7. Change the system language

The system has two languages: English and Vietnamese.

To change the language, select the flag icon  on the menu bar and then select the language you want to display.