# User Guide

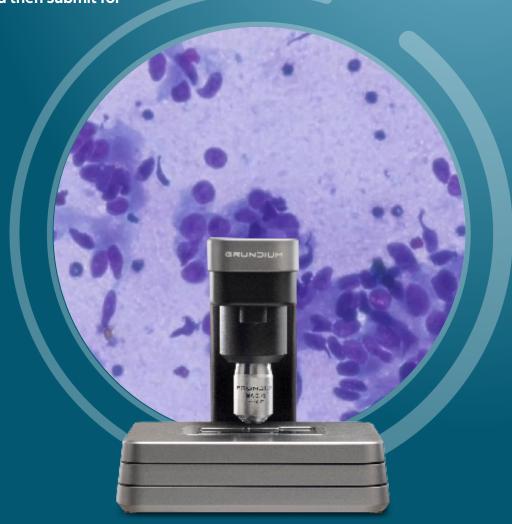
A first-of-its-kind technology, offering AI Faecal, AI Urine Sediment, AI Dermatology, AI Blood Smear, AI Masses and Digital Cytology image transfer in a single platform



Digital Cytology

# User Guide

VETSCAN IMAGYST™ accelerates the process for expert clinical pathology review – simply prepare and scan slides and then submit for expert results



### Efficient, expert cytology review

Vetscan Imagyst® accelerates the process for expert clinical pathology review - simply prepare and scan slides and then submit for expert results



#### **Prepare** Cytology Slide



- Prepare a cytology slide using industry best practices
- Using a pencil, label the slide including the patient's ID and date
- Stain all slides with a Romanowsky-type stain (eg. Diff-Quik™) as per manufacturers protocol (dipping method recommended)
- · After the slide has been stained and air-dried, place immersion oil on the slide, then cover with 24 x 60 mm coverslip



#### Δdd **New Test**



- Log in to VETSCAN IMAGYST
- Request a cytology test from any HUB or FUSE connected software
- If no integration is available, from the Imagyst landing page, click the INBOX (+) button to ADD TEST
- Choose the correct sample from the Imagyst platform and select START



### Complete

Patient History

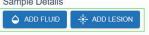


- Enter the patient's species, breed, age and gender (if not already pre-populated)
- If species is 'other', clearly note the species type in clinical history
- Include a brief clinical history including medications (this history will be visible on the final report)
- Select the required service: Standard or Urgent Review



#### Δdd Sample Sites

Sample Details



- Select ADD FLUID or ADD **LESION**
- Enter the required information
- Select CREATE
- You may enter up to 2 different sample sites with up to 4 slides across these 2 sites
- Select a sample card to open and edit a sample site
- To remove a sample site, open sample site card and select DELETE (X)





- Select ADD A SCAN or **SCANS** to open the scan window
- Select an available scanner
- Select **OPEN TRAY** and place cytology slide on the tray, ensuring label/patient details are towards the right
- Lock the slide in place by closing the locking mechanism



#### Create Scan Area



- Select PREVIEW
- Review the mask area (multiple mask areas may be suggested)
- Adjust mask area by moving/ deleting blue dots OR create a custom mask area by deleting the entire mask then select the EDIT pencil to create new mask.
- Select **CONTINUE** when you are satisfied (the pathologist can only review what is in the masked area).
- · Limiting the masked area to reduce time may impact the pathologist's ability to interpret
- Once the scan is complete, remove slide immediately



- To assist the pathologist with their interpretation, attach any dlood results or history documents (.pdf) or photos (.ipea)
- Select **SUBMIT ORDER**



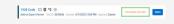
## Review



- When the pathologist's interpretation is complete and is ready to be reviewed, select **READY FOR REVIEW**
- Find the desired test and select **REVIEW**
- · Review the findings
- Click on **FINALISE** and the test will move to TEST HISTORY

#### **Incomplete Tests**

• An incomplete or unsubmitted test will display an Incomplete **Test Order** status in the Inbox



- Select **OPEN** to complete all required fields
- Review steps 3-7

This is a general user guide for Digital Cytology. For specific sample preparation and submission, refer to designated 'How to' videos in the help section on the Imagyst Platform





## vetscan Imagyst<sup>\*</sup> Al Masses

# User Guide

Getting started with Vetscan Imagyst® for efficient cytology results



## Accessible cytology screenings to help increase compliance

Vetscan Imagyst® quickly and reliably identifies cells suggestive of neoplasia in common lymph node and subcutaneous masses



## Prepare



- Prepare a masses slide with a Romanowsky-type stain (eg. Diff-Quik™) One slide per submission
- Add sample to slide area that is not frosted
- Using a pencil, label the slide including patient ID and date
- After the slide has been stainded and air dried, place immersion oil on the slide than cover with 24 x 60 mm coverslip



#### Add New test



- Log in to VETSCAN IMAGYST
- Request an AI masses test from any HUB or FUSE connected software
- If no integration is available, from the Imagyst landing page, click the INBOX (+) button to ADD TEST
- Choose the correct sample from the Imagyst platform and select SCAN



## **Complete**Sample information



 Enter the Site Name, Preparation Type and Body Region



## Scan



- · Select an available scanner
- Select OPEN TRAY and place the slide on the tray, ensuring label/patient details are towards the right
- Lock the slide in place by closing the locking mechanism



## **Create**Scan area



- Select **PREVIEW** and review the suggested mask area
- Accept the suggested mask area, or create a custom mask
- Select CONTINUE when you are satisfied with the mask area
- Once the scan is complete, remove slide immediately Select **PREVIEW**
- Select **CONTINUE**, then **CLOSE**



## Review



- Find your test and select **REVIEW**
- FINALISE the report to move it to TEST HISTORY
- Select VIEW REPORT to access the PDF for download or print
- Submit results for additional pathologist review, if needed (see Add-On Expert Review)



(Optional; up to 3 additional slides)

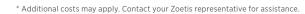
- Select Add New Test (+)
- Choose the sample
- Attach history documents (.pdf) or photos (.jpeg)
- Select CLOSE, then SUBMIT ORDER
- Find the desired tests and select **REVIEW**

#### **Incomplete Tests**



Add test

- An incomplete or unsubmitted test will display an Incomplete Test Order status in the Inbox
- Select **OPEN** to complete all required fields
- Review steps 3-6



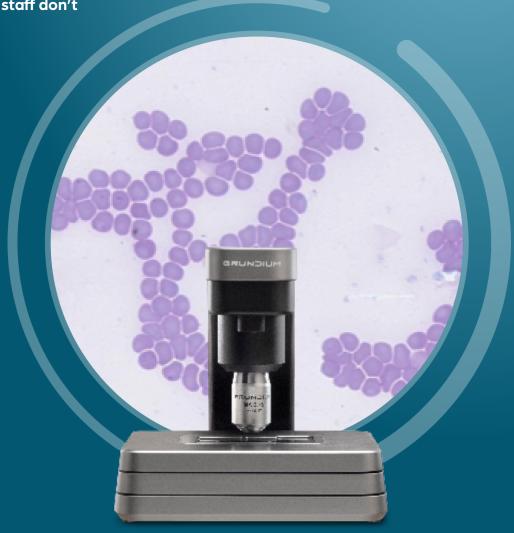




Al Blood Smear

# User Guide

VETSCAN IMAGYST™ uses the accuracy of AI to efficiently read blood smears in minutes, so you and your staff don't have to



## Efficient, accurate blood smear review

Vetscan Imagyst<sup>®</sup> uses the accuracy of AI to efficiently read blood smears in minutes, so you and your staff don't have to<sup>1</sup>



## **Prepare**Blood Smear



- Prepare a blood smear slide using industry best practices Using a pencil, label the slide including the patient's ID and date
- Stain all slides with a Romanowsky-type stain (eg. Diff-Quik™) as per manufacturers protocol (dipping method recommended)
- After the slide has been stained and air-dried, place immersion oil on the slide, then cover with 24 x 60 mm coverslip



#### Add New Test



- Log in to VETSCAN IMAGYST
- Request an AI blood smear test from any HUB OR FUSEconnected software
- If no integration is available, from the Imagyst landing page, click the INBOX (+) button to ADD TEST.
- Enter required information and then select **CREATE**
- Choose the correct sample from the Imagyst platform and select SCAN



#### Complete

Patient History



- Enter the RBC count from the Automated CBC. This is required for a polychromatophil count to be reported
- Enter the WBC Count from the automated CBC report



### Add



- Select an available scanner
- Select OPEN TRAY and place blood smear slide on the tray, ensuring label/patient details are towards the right
- Lock the slide in place by closing the locking mechanism



## **Create**Scan Area



- Select PREVIEW. Review mask area and ensure the entire blood smear is selected within the mask
- If the mask does not cover the entire blood smear, delete suggested mask by selecting area and DELETE (X)
- Select the EDIT pencil to create a new mask around the entire blood smear (warning icon indicates estimated scan time)
- Select CONTINUE when you are satisfied with the mask area
- Once the scan is complete, remove slide immediately



#### Review

Tests



- When a test is ready to be reviewed, select **READY FOR REVIEW**
- Find the desired test and select REVIEW
- Review the findings Click on FINALISE and the test will move to TEST HISTORY If you require a pathologist interpretation, request an Add on Expert Review



#### Add-on Expert Review\*

(Optional)

- Request an Add On Expert Review from any HUB or FUSE connected software
- If no integration is available, from the Imagyst landing page, click the INBOX (+) button to ADD TEST. Enter required information and then select CREATE.
- Highlight the correct sample from the Imagyst platform for Expert Review then SELECT TEST
- To assist the pathologist with their diagnosis complete brief CLINICAL HISTORY, attach results including CBC (.pdf) or photos (.jpeg)



- Select SUBMIT ORDER\*
- When the clinical pathologist's interpretation is complete and is ready to be reviewed, select READY FOR REVIEW
- Find the desired test and select REVIEW
- Review the findings click on FINALISE and the test will move to TEST HISTORY

#### **Incomplete Tests**



- An incomplete or unsubmitted test will display an **Incomplete Test Order** status in the Inbox
- Select **OPEN** to complete all required fields
- Review steps 3-6

- 1. Data on file, Study No. D870R-US-21-045
- $^{st}$  Option to send digital slide image to our network of clinical pathologists as needed. Additional costs apply





Al Urine Sediment

## User Guide

Vetscan Imagyst\* offers reliable urine sediment analysis at the point of care, with results in minutes and Add-on Clinical Pathologist Review\* when needed<sup>3</sup>



## **Consistent urine sediment analysis**

Vetscan Imagyst® offers reliable urine sediment analysis at the point of care, with results in minutes and Add-on Clinical Pathologist Review\* when needed1



Centrifuge The Sample



- Determine if dilution may be necessary
- Urine must be at room temperature
- Mix the sample well
- Transfer 1, 2, or 3 mLs to the centrifugation tube
- Centrifuge, with a corresponding tube for balance, for 2 minutes at 450-500 RCF
- Allow it to come to a complete stop



**Prepare** 



- Attach the XactUrine® pipette tip to the micropipette
- Place the pipette with tip attached in the tube
- Tilt the tube to pour off the supernatant until no liquid is visualised above the stopper
- Return the tube to vertical
- Complete dilution if necessary<sup>†</sup>
- Press the pipette 5 times, or until the pellet is resuspended



**Prepare** 



- Place a pre-printed slide on the template
- Orient the fiducial circle toward the bottom of template
- Using a pencil, label the slide with patient information on the frosted edge (including patient's ID and date)
- Once pellet is resuspended, place 20µL in the fiducial circle
- Cover with a 22 x 22 mm coverslip



**Prepare New Test** 



- Log in to VETSCAN **IMAGYST**
- · Request an Al Urine Sediment test from any **HUB OR FUSE-connected** software
- If no integration is available, from the Imagyst landing page, click the INBOX (+) button to ADD TEST
- Enter required information and then select CREATE
- Choose the correct sample from the Imagyst platform and select **SCAN**



Complete Sample Information



- · Select the urine volume
- Enter the dilution factor, if applicable
- Enter any additional information, including sample colour, clarity, USG and sample pH





- Select an available scanner
- Select **OPEN TRAY** and place blood smear slide on the tray, ensuring label/patient details are towards the right
- · Lock the slide in place by closing the locking mechanism
- Select SCAN SLIDE



Review Results



- Select **REVIEW**
- Review any captured images
- Manually select additional images for inclusion in the report, if needed
- For a closer look, select **VIEW SLIDE**
- **FINALISE** the report to move it to **TEST HISTORY**
- Select SHARE or download a printable PDF



#### Add-on Expert Review\*

(Optional)



- Request an Add On Expert Review from any HUB or FUSE connected software
- If no integration is available, from the Imagyst landing page, click the INBOX (+) button to ADD TEST. Enter required information and then select CREATE.
- Choose the correct sample from the Imagyst platform and select test For Expert Review or search for test/ patient ID then **SELECT TEST**
- Complete brief **CLINICAL HISTORY**, attach results including CBC (.pdf) or photos (.jpeg)

- Add a stained urine sediment smear or line prep slide, ensuring the masked area is adequate (the pathologist can only review what is in the masked area). Refer to the Al Urine Sediment 'How to' video on the Imagyst Platform
- Select SUBMIT ORDER
- When the clinical pathologist's interpretation is complete and is ready to be reviewed, select READY FOR REVIEW
- Find the desired test and select **REVIEW**
- Review the findings click on FINALISE and the test will move to **TEST HISTORY**



#### Create Stained Slide

- · Mix the remaining urine sediment well
- Use one drop to create smear or line-prep
- Allow to air-dry
- Stain the slide using a Romanowsky-type stain (e.g. Diff-Quik®)
- Allow to air-dry
- · Add one drop of immersion oil
- Place a 24 x 60 mm coverslip used for the Digital Cytology Application

- 1. Data on file. Study No. DHXMZ-US-23-218, 2023, Zoetis Inc.
- \* Option to send digital slide image to our network of clinical pathologists as needed. Additional costs apply.
  † Refer to dilution guide.







Al Dermatology

# User Guide

VETSCAN IMAGYST™ quickly and reliably detects yeast, inflammatory cells and bacteria and differentiates between cocci and rods



## Fast, efficient dermatology analysis

Vetscan Imagyst<sup>®</sup> quickly and reliably detects yeast, inflammatory cells and bacteria and differentiates between cocci and rods<sup>1</sup>



### Prepare

Dermatology Slide



- Prepare a dermatology slide using industry best practices
- Using a pencil, label the slide including the patient ID and date
- Stain all slides with a Romanowsky-type stain (eg. Diff-Quik™) using industry best practices (dipping method recommended)
- After the slide has been stained and air-dried, place immersion oil on the slide, then cover with 24 x 60 mm coverslip



#### Add New Test



- Log in to VETSCAN IMAGYST
- Request an AI dermatology test from any HUB or FUSE connected software
- If no integration is available, from the Imagyst landing page, click the INBOX (+) button to ADD TEST
- Choose the correct sample from the Imagyst platform and select SCAN



## Complete Patient History



 Enter the Site Name, Location of Sample and Blood Present information



### Add



- · Select an available scanner
- Select OPEN TRAY and place slide on the tray, ensuring label/ patient details are towards the right
- Lock the slide in place by closing the locking mechanism



## **Create** Scan Area



- Select PREVIEW
- Review the mask area (multiple mask areas may be suggested)
- Adjust mask area by moving/ deleting blue dots OR create a custom mask area by deleting the entire mask then select the EDIT pencil to create new mask.
- Ensure whole sample area is masked (multiple masks may be used to limit white area).
- Note: if an Add on Expert Review is required, a pathologist will only be able to review the masked area (warning icon indicates estimated scan time)
- Select CONTINUE when you are satisfied with masked area. Select CLOSE. The scan sample will be analysed
- Once the scan is complete, remove slide immediately



#### Review Tests



- When a test is ready to be reviewed, select READY FOR REVIEW
- Find the desired test and select REVIEW
- Review the findings
- Click on FINALISE, and the test will move to TEST HISTORY
- If you require a pathologist interpretation, request an Add on Expert Review

### **Add-on Expert Review\***

(Optional)

- Request an Add On Expert Review from any HUB or FUSE connected software
- If no integration is available, from the Imagyst landing page, click the INBOX (+) button to ADD TEST.
- Enter required information and then select CREATE.
- Highlight the correct sample from the Imagyst platform for Expert Review then SELECT TEST
- To assist the pathologist with their diagnosis complete brief CLINICAL HISTORY, attach results including CBC (.pdf) or photos (.jpeg)



- Select SUBMIT ORDER\*
- When the clinical pathologist's interpretation is complete and is ready to be reviewed, select READY FOR REVIEW
- Find the desired test and select REVIEW
- Review the findings click on FINALISE and the test will move to TEST HISTORY

#### **Incomplete Tests**

1928 Cody [2] ■ \*4 ⊗

- An incomplete or unsubmitted test will display an Incomplete Test Order status in the Inbox
- Select **OPEN** to complete all required fields
- Review steps 3-6

- 1. Data on file, Study No. DHX6Z-US-23-222, 2023, Zoetis Inc.
- \* Option to send digital slide image to our network of clinical pathologists as needed. Additional costs apply

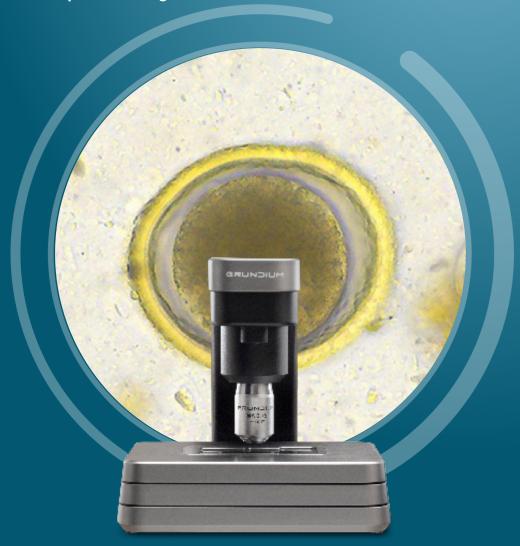




# vetscan Imagyst<sup>\*</sup> Al Faecal

# User Guide

Vetscan Imagyst<sup>®</sup> is powered by AI to help veterinarians make accurate and timely intestinal parasitic diagnoses<sup>1,2</sup>



### Fast, accurate faecal diagnostics

VETSCAN IMAGYST™ is powered by artificial intelligence (AI) to help veterinarians make accurate and timely intestinal parasitic diagnoses<sup>1,2</sup>



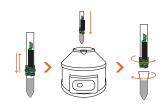




- Unscrew the tube cap from the collection tube
- Add 1 scoop, about 1 g, of faecal matter to the collection tube
- Use stir stick to remove the matter from the scoop and mix it with prefilled solution
- Screw the sample tube onto the collection tube
- Continue twisting until the tubes are firmly screwed together



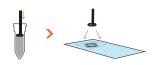
#### **Prepare** Faecal Sample



- Shake the tubes and then place them in a centrifuge
- Spin the sample for 2 minutes at 500 RCF
- Unscrew the collection tube with the scoop and discard
- Lay the sample tube in a tray



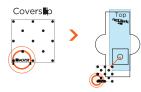
## **Add Smple**



- · Place slide in the slide template with the name or barcode toward the top
- Transfer material from the top of the sample tube using the transfer loop
- Place 2-4 loops of faecal matter in the target area on the slide
- · On the Imagyst Platform (in the help section), refer to faecal 'How to' video -'step 3: add sample to slide'



#### **Place** Coverslip



Place the coverslip, with 'IMAGYST' readable in the lower left-hand corner, onto the slide over the targeted area of the slide template



## Initiate



- · Choose correct sample and select SCAN. Sample information will come pre-populated from any HUB or FUSE- connected software system
- If no integration is available, select ADD SAMPLE, enter the sample information, select CREATE and then select SCAN
- Select a scanner, and make sure the tray is open (select OPEN TRAY if necessary)



#### Load and Scan Slide



- · Unlock the slide holder and place the slide (with coverslip) on the slide tray
- Place any label or writing toward the right side of the slide tray and lock the slide holder
- Select **SCAN SLIDE** Once the scan is complete, remove slide immediately



## **Review**



- · Open the sample results, review any captured images and select examples for inclusion in the report
- · Add any comments (these comments will be visible on the final report) and select FINALISE
- Select VIEW REPORT to view a shareable PDF or review results in a HUB or FUSE-connected software system
- Nagamori Y, Hall-Sedlak R, Blagburn B, et al. Multicenter evaluation of the Vetscan Imagyst system using Ocus 40 and EasyScan One scanners to detect gastrointestinal parasites of feces in dogs and cats. Journal of Veterinary Diagnostic Investigation. 2023;36(1). doi: 10.1177/10406387231216185.

  2. Data on file, Study No. DHX6Z-US-22-131, 2022, Zoetis Inc.



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Learn more at http://www.zoetisdiagnotics.co.nz

