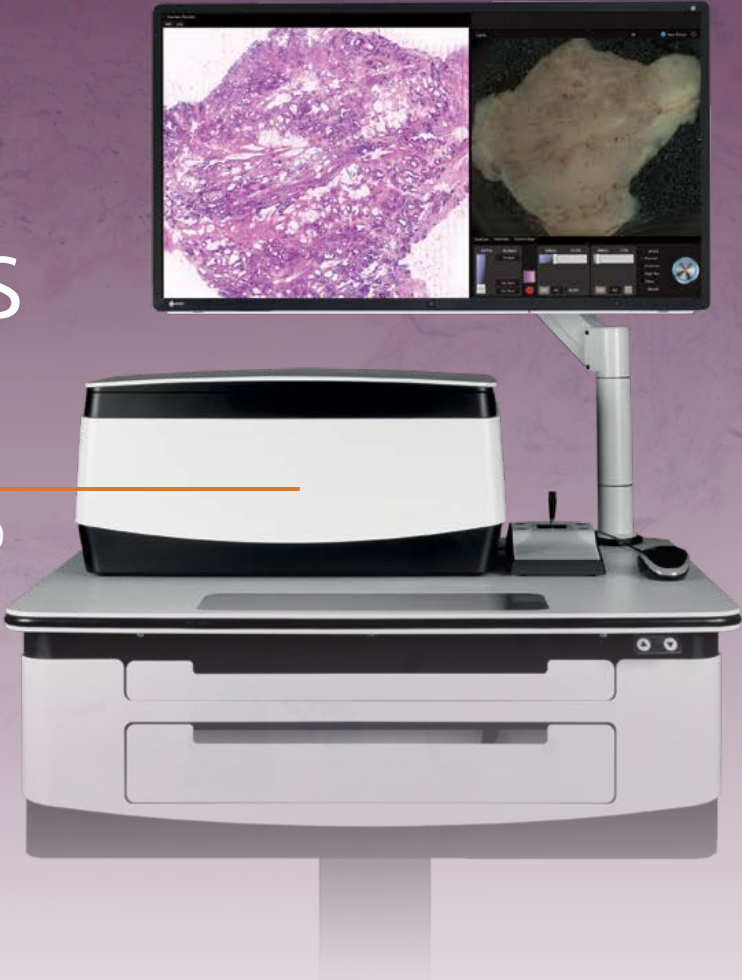


# Impressive publications

with the VivaScope 2500



## Take a closer look in your special field:

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- All publications** .....

## Dermatology > Skin

### Revolution in fast pathology in dermatology

<b>Application</b>	Review
<b>Study design</b>	A comprehensive review of 79 publications
<b>Microscope generation</b>	G4-G3
<b>Clinical partner (principal investigator)</b>	Dept. of Dermatology, Hospital Clinic of Barcelona, IDIBAPS, University of Barcelona, Barcelona, Spain (Dr. S. Puig & Dr. J. Malvehy)


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 PMID: 32134506  
(2020)

### 96.5% specificity and 73.6% sensitivity

<b>Application</b>	BCC margin control
<b>Study design</b>	101 BCCs 78 patients
<b>Microscope generation</b>	G4
<b>Clinical partner (principal investigator)</b>	Dept. of Dermatology, Venereology and Allergology, University Hospital Leipzig AoER, Leipzig, Germany (Dr. S. Grunewald)


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 PMID: 33768732  
(2021)

### 91% specificity and 92% sensitivity

<b>Application</b>	BBC margin control
<b>Study design</b>	46 frozen sections of BCCs
<b>Microscope generation</b>	G4
<b>Clinical partner (principal investigator)</b>	Dept. of Dermatology and Allergy, University Hospital, LMU Munich, Munich, Germany (Dr. Hartmann)


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 PMID: 33991061  
(2021)

### 92.3% specificity and 96.3% sensitivity

<b>Application</b>	Oral leukoplakia
<b>Study design</b>	27 oral lesions 22 patients
<b>Microscope generation</b>	G4
<b>Clinical partner (principal investigator)</b>	Dept. of Oral and Maxillofacial Surgery, University Hospital Heidelberg, Heidelberg, Germany (Dr. V. Shavlokhova)


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 PMID: 34073373  
(2021)

### High potential in rapid diagnosis and evaluation of the fresh excised OSCCs

<b>Application</b>	Oral squamous cell carcinomas (OSCCs)
<b>Study design</b>	38 OSCCs 35 patients
<b>Microscope generation</b>	G4
<b>Clinical partner (principal investigator)</b>	Dept. of Oral and Maxillofacial Surgery, University Hospital Heidelberg, Heidelberg, Germany (Dr. V. Shavlokhova)


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 PMID: 33368199  
(2021)

### 95% specificity and 99% sensitivity

<b>Application</b>	Oral squamous cell carcinomas (OSCCs)
<b>Study design</b>	70 oral lesions 70 patients
<b>Microscope generation</b>	G4
<b>Clinical partner (principal investigator)</b>	Dept. of Oral and Maxillofacial Surgery, University Hospital Heidelberg, Heidelberg, Germany (Dr. V. Shavlokhova)


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 PMID: 32418329  
(2020)

### 99% specificity and 88% sensitivity

<b>Application</b>	BCC subtypes
<b>Study design</b>	78 BCCs 78 patients
<b>Microscope generation</b>	G4
<b>Clinical partner (principal investigator)</b>	Dept. of Dermatology, Hospital Clinic of Barcelona, IDIBAPS, University of Barcelona, Barcelona, Spain (Dr. J. Malvehy & Dr. J. Perez-Anker)


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 PMID: 31220341  
(2020)

### Inflammatory patterns were very well distinguished e.g. infiltrated lymphocytes and neutrophils

<b>Application</b>	Inflammatory skin disease
<b>Study design</b>	6 mm punch biopsies 33 patients
<b>Microscope generation</b>	G4
<b>Clinical partner (principal investigator)</b>	Dept. of Dermatology, Venereology and Allergology, University of Leipzig, Leipzig, Germany (Dr. S. Grunewald & J. Mentzel)


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 PMID: 33085808  
(2020)

## Dermatology &gt; Skin

***Histomorphological and immunofluorescence features of PV were detected simultaneously in one imaging session***

Application	Pemphigus Vulgaris
Study design	20 Pemphigus Vulgaris sections
Microscope generation	G4
Clinical partner (principal investigator)	Dept. of Dermatology and Allergy, University Hospital, LMU Munich, Munich, Germany (Dr. Hartmann)


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 PMID: 33491324  
(2021)
***Distinguished almost all skin morphological features in a pilot study***

Application	Normal morphology
Study design	26 healthy skins
Microscope generation	G4
Clinical partner (principal investigator)	Dept. of Dermatology, Venereology and Allergology, University Hospital Leipzig AoER, Leipzig, Germany (Dr. S. Grunewald )


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 PMID: 31732988  
(2020)
***Cutaneous Atlas of Ex Vivo Confocal Microscopy***

Application	Book
Study design	A comprehensive resource to the applications of VS2500 in skin
Microscope generation	G4
Clinical partner (principal investigator)	Dept. of Dermatology, Hospital Clinic of Barcelona, IDIBAPS, University of Barcelona, Barcelona, Spain (Dr. J. Malvehy & Dr. J. Perez-Anker)

NEW


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 BOOK  
(2022)
***76% specificity and 98% sensitivity***

Application	Tumour diagnosis BCC, SCC, MM, etc...
Study design	120 skin samples, 91 patients
Microscope generation	G4
Clinical partner (principal investigator)	Dept. of Dermatology and Allergy, University Hospital, LMU Munich, Munich, Germany (Dr. Hartmann)

NEW


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PMID: 35233962 (2022)

## Dermatology &gt; Nail

***91.7% specificity and 90.5% negative predicted value***

Application	Onychomycosis
Study design	57 patients
Microscope generation	G4
Clinical partner (principal investigator)	Dept. of Dermatology and Allergy, University Hospital, LMU Munich, Munich, Germany (Dr. Hartmann)


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 PMID: 33240908  
(2020)

## Urology > Prostate

### 100% specificity and 79% sensitivity

Application	Biopsy
Study design	121 MRI-fused prostate biopsy samples 10 patients
Microscope generation	G4
Clinical partner (principal investigator)	Dept. of Pathology, Klinikum Lippe GmbH, Detmold, Germany (Ulf Titze, Torsten Hansen & Prof. K. Sievert)


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 PMID: 33816171  
(2021)

### 93.5% specificity and 83.3% sensitivity

Application	Biopsy
Study design	89 samples 13 patients
Microscope generation	G4
Clinical partner (principal investigator)	Dept. of Urology, University of Modena and Reggio Emilia, Modena, Italy (Prof. G. Bianchi, Prof. R. Montironi & Prof. B. Rocco)


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 PMID: 30908852  
(2019)

### 97.5% specificity and 88% sensitivity

Application	Biopsy
Study design	80 biopsies of 18-G thickness
Microscope generation	G4
Clinical partner (principal investigator)	Dept. of Surgical, Medical, Dental and Morphological Sciences with Interest transplant, Oncological and Regenerative Medicine, University of Modena and Reggio Emilia, Modena, Italy (Prof. R. Montironi & Prof. B. Rocco)


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 PMID: 31907606  
(2020)

### 81% Cohen's K agreement

Application	Biopsy
Study design	182 MRI-guided core biopsies 57 patients
Microscope generation	G4
Clinical partner (principal investigator)	Dept. of Urology, Fundacion Instituto Valenciano de Oncologia, Valencia, Spain (Dr. A. Calatrava, J. Casanova & Dr. Jose Rubio)


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 PMID: 32912840  
(2020)

### Cohen's K agreement was 94% for fatty tissue and 97.14% for muscular/vascular tissues

Application	Margin control
Study design	41 prostate margins 20 patients
Microscope generation	G4
Clinical partner (principal investigator)	Dept. of Urology, University of Modena and Reggio Emilia, Modena, Italy (Prof. R. Montironi & Prof. B. Rocco)


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 PMID: 31971342  
(2020)

### 97.2% specificity and 86.3% sensitivity

Application	Biopsy
Study design	427 core biopsies 54 patients
Microscope generation	G4
Clinical partner (principal investigator)	Dept. of Urology, University of Modena and Reggio Emilia, Modena, Italy (Prof. R. Montironi & Prof. B. Rocco)


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 PMID: 32952095  
(2020)

### A novel approach to evaluate prostate margins

Application	Margin control
Study design	8 prostate margins
Microscope generation	G4
Clinical partner (principal investigator)	Dept. of Urology, University of Modena and Reggio Emilia, Modena, Italy (Prof. R. Montironi & Prof. B. Rocco)


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 PMID: 32401370  
(2020)

### The real-time pathology of core biopsies potentially reduces disease recurrence and functional complications

Application	Cryotherapy
Study design	MRI-fused core biopsies 10 patients
Microscope generation	G4
Clinical partner (principal investigator)	Dept. of Urology and Renal Transplantation, University of Foggia, Foggia, Italy (Dr. O. Selvaggio, Prof. G. Carrieri)


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 Posater MP46-14  
(2021)

## Urology > Prostate

### 95% specificity and 93% sensitivity

NEW

Application	Biopsy
Study design	532 MRI-guided prostate biopsies 34 patients
Microscope generation	G4
Clinical partner (principal investigator)	Dept. of Urology, University Hospital OWL, Campus Lippe, Detmold, Germany (Ulf Titze, Torsten Hansen & Prof. K. Sievert)



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PMID: 35626301  
(2022)

### All patients had negative margins at final histopathology report

NEW

Application	Margin control method
Study design	21 patients Moh's Technique for shaving
Microscope generation	G4
Clinical partner (principal investigator)	Dept. of Urology, University of Modena and Reggio Emilia, Modena, Italy (Prof. R. Montironi & Prof. B. Rocco)



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PMID: 33965288  
(2022)

### Cohen's K agreement for tumor detection was 96.8%

NEW

Application	Biobanking
Study design	127 punch biopsies from the prostatectomies, 40 patients
Microscope generation	G4
Clinical partner (principal investigator)	Dept. of Urology, University Hospital OWL, Campus Lippe, Detmold, Germany (Ulf Titze, Torsten Hansen & Prof. K. Sievert)



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PMID: 36292970  
(2022)

## Urology > Kidney

### K agreement was strong (1 to 0.97) for most tissue compartments

Application	Biopsy
Study design	24 renal autopsies were sampled with spring-loaded biopsy device
Microscope generation	G4
Clinical partner (principal investigator)	Nephrology and Renal Transplantation Dept., Hospital Clinic of Barcelona, University of Barcelona, Barcelona, Spain (Dr. J. Malveyh & Dr. A Garcia-Herrera)



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PMID: 32876939  
(2020)

### Detection of tumor and normal tissue in 100% of cases

Application	Biopsy
Study design	8 ultrasound-guided core biopsies 4 patients
Microscope generation	G4
Clinical partner (principal investigator)	Dept. of Urology, Fundacion Instituto Valenciano Oncologia, Valencia, Spain (M Carmen Mir, Dr. A. Calatrava & Dr. J. Rubio)



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PMID: 31833726  
(2020)



## Urology > Bladder

### High sensitivity and specificity in agreement with the final histopathologic images

Application	TURBT
Study design	50 TUR-bladder
Microscope generation	G4
Clinical partner (principal investigator)	Asklepios Clinic Barbek, Dept. of Urology, Hamburg, Germany (Dr. C. Netsch)



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Nord-congress of urology  
HF- 12-03 (2020)

## Senology > Breast

### High rate of tumor diagnosis (16 out of 17)

NEW

Application	Biopsy & Margin control
Study design	17 biopsies & surgical samples
Microscope generation	G4
Clinical partner (principal investigator)	Dept of Pathology, Medical University of Vienna, Vienna, Austria (Dr. Heinz Regele)



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PMID: 35765032  
(2022)

## Urology > Bladder & ureter

### 100% agreement

Application	TURBT & flexible-URS
Study design	5 bladder and 1 ureter samples      4 patients
Microscope generation	G4
Clinical partner (principal investigator)	Dept. of Urology, University of Modena and Reggio Emilia, Modena, Italy (Dr. S. Puliatti, Prof. G. Bianchi, Prof. B. Rocco)



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34th annual EAU congress  
(2019)

## Gastroenterology > Liver & Pancreas

### Perfect suitability for tumor diagnosis (k = 1.00)

NEW

Application	Biopsy
Study design	39 biopsy, autopsy & surgical samples 33 patients
Microscope generation	G4
Clinical partner (principal investigator)	Institute of Pathology, Campus Lippe, University Hospital OWL of the University of Bielefeld, 32756 Detmold, Germany (Dr. Ulf Titze)



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PMID: 35158859  
(2022)

## Gastroenterology > Intestine

### Immediate diagnosis of tubular adenoma with high-grade dysplasia

<b>Application</b>	Endoscopic biopsy
<b>Study design</b>	Case report
<b>Microscope generation</b>	G4
<b>Clinical partner (principal investigator)</b>	Melanoma Unit, Dept. of Dermatology, Hospital Clinic of Barcelona, IDIBAPS, University of Barcelona, Barcelona, Spain (Dr. J. Malvehy & Dr. Miriam Cuatrecasas)



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PMID: 32376329 (2020)

### Tubular adenoma: 84% specificity and 95% sensitivity serrated sessile lesion: 96% specificity and 69.5% sensitivity

<b>Application</b>	Endoscopic biopsy
<b>Study design</b>	36 polyps
<b>Microscope generation</b>	G4
<b>Clinical partner (principal investigator)</b>	Endoscopy Unit, Dept. Of Gastroenterology, Hospital Clinic of Barcelona, IDIBAPS, University of Barcelona, Barcelona, Spain (Dr. J. Malvehy & Dr. Miriam Cuatrecasas)



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Gastrointestinal Endoscopy Mo1653 (2020)

## Gastroenterology > Pancreas

### Rapid evaluation of EUS fine-needle biopsy sampling in pancreatic solid lesions: Cohen's K agreement was 95% and 100% sensitivity

<b>Application</b>	Biopsy & CytoMatrix
<b>Study design</b>	EUS-Fine Needle Biopsy samples 81 patients
<b>Microscope generation</b>	G4
<b>Clinical partner (principal investigator)</b>	Dept of Operative Endoscopy, Campus Bio-Medico University Hospital, Rome, Italy (Dr. Anna Crescenzi & Dr. F. M. Di Matteo)



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PMID: 33798539 (2021)

## Multiple > Multiple

### 97.3% specificity and 91.6% sensitivity

<b>Application</b>	IR-guided needle biopsy
<b>Study design</b>	105 core needle biopsies 105 patients
<b>Microscope generation</b>	G4
<b>Clinical partner (principal investigator)</b>	Division of Pathology and Laboratory Medicine, The University of Texas MD Anderson Cancer Center, Houston, USA (Dr. S. Krishnamurthy & Prof. S. Gupta)



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PMID: 32134465 (2020)

### 97.3% specificity and 95,5% sensitivity

<b>Application</b>	Margin control
<b>Study design</b>	118 surgical specimens
<b>Microscope generation</b>	Prototype G4
<b>Clinical partner (principal investigator)</b>	Division of Pathology and Laboratory Medicine, The University of Texas MD Anderson Cancer Center, Houston, USA (Dr. S. Krishnamurthy & Prof. S. Gupta)



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PMID: 30376375 (2018)

### matched accurately with corresponding Diff-Quik- and H&E-images



<b>Application</b>	Tissue scraps biopsy
<b>Study design</b>	91 smears & 52 cell pellets Breast, liver, lung, & Kidney
<b>Microscope generation</b>	G4
<b>Clinical partner (principal investigator)</b>	Division of Pathology and Laboratory Medicine, The University of Texas MD Anderson Cancer Center, Houston, USA (Dr. S. Krishnamurthy & Prof. S. Gupta)



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PMID: 34628480 (2022)