0-Click AI-Solutions for Clinical Routine (CE-IVD)

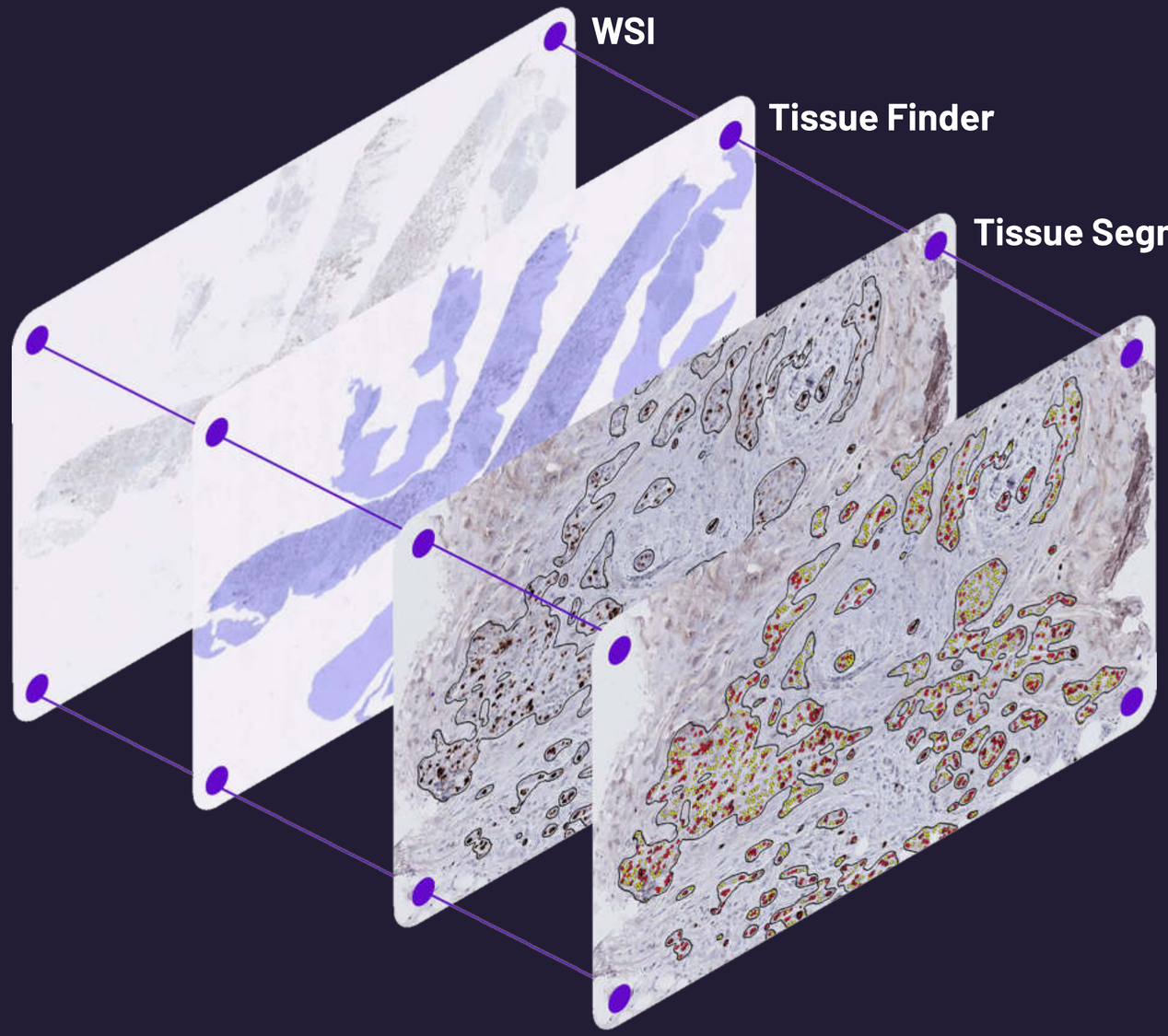
SDiPath Annual Meeting
January 19th, 2023, Bern (CH)

Dr. Anil Berger (VP Sales & Marketing)

mindpeak

0-Click AI for Biomarker Analysis

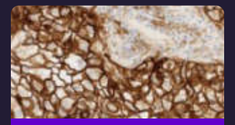
Patent pending



Clinical Result

The Largest Number of CE-Marked AI Algorithms available for you today

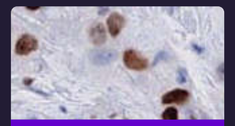
mindpeak



CE Marked

PD-L1 Lung NSCLC

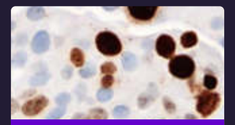
Our PD-L1 product for NSCLC for SP263 helps you quantify tumor cells to for diagnosing the TPS score



CE Marked

Ki-67 HS Breast

Ki-67 Hotspot is the solution for all labs that quantify with the *old* guidelines. It is a 0-click solution. WSI-results only need to be checked by a pathologist.



CE Marked

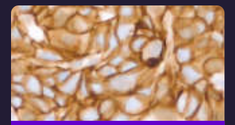
Ki-67 4R Breast

Ki-67 4R is the solution for all labs that implement the *new WHO* guidelines. It is a 0-click solution. WSI-results only need to be checked by a pathologist.

CE Marked

ER Breast

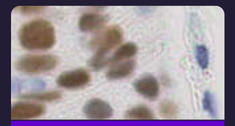
ER is a 0-click solution for the quantification of a whole WSI. Results only need to be checked by a pathologist.



CE Marked

HER2 Breast RoI

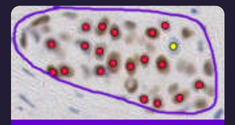
is a solution for the quantification of a RoI , including Her2Low. Pathologists draw a RoI and check the results.



CE Marked

PR Breast

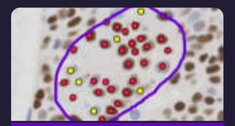
PR is a 0-click solution for the quantification of a whole WSI. Results only need to be checked by a pathologist.



CE Marked

ER RoI Breast

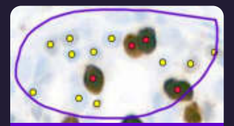
ER RoI Breast is a solution for labs with a limited internet bandwidth or for microscope camera images.



CE Marked

PR RoI Breast

PR RoI Breast is a solution for labs with a limited internet bandwidth or for microscope camera images.

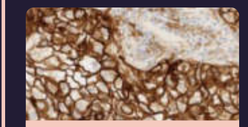


CE Marked

Ki-67 RoI Breast

Ki-67 RoI Breast is a solution for labs with a limited internet bandwidth or for microscope camera images.

Research Use Only AI Algorithms



RuO

PD-L1 Lung AllClones

Our PD-L1 product for NSCLC for any antibody clone helps you quantify tumor cells to for diagnosing the TPS score

RuO

PD-L1 ESCC

is a 0-click solution for the quantification of a whole WSI for PD-L1 stained esophageal squamous Cell carcinoma.

RuO

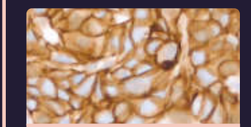
PD-L1 Urothel

is a 0-click solution for the quantification of a whole WSI for PD-L1 stained bladder cancer.

RuO

PD-L1 Gastric

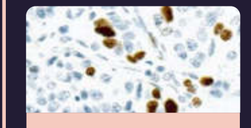
is a 0-click solution for the quantification of a whole WSI for PD-L1 stained gastric cancer.



RuO

HER2 Breast

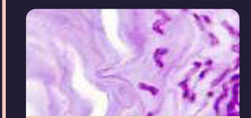
is a 0-click solution for the quantification of a whole WSI.
Results only need to be checked by a pathologist.



RuO

Ki-67 Neuroendocrine

Quantification of Ki-67 stained neuroendocrine tumors using an RoI.



RuO

Onychomycosis

Our Nail fungus AI analysis the WSI and detects nail fungus with an AUC of 0.98*.

RuO

p53 Breast

p53 is a solution for the quantification of p53 marked cells in Breast cancer. Pathologists draw a RoI and check the results.

mindpeak

+10.000 patients diagnosed with our AI assiting

Unilabs

BioReference LABORATORIES an OPKO Health Company

HELIOS Klinikum

UNIVERSITÄTSmedizin. MAINZ

LINKÖPING UNIVERSITY

zna

Universitätsklinikum Erlangen

Świętokrzyskie Centrum Onkologii

PATHO COM Pathologie für's Leben

Intermountain Healthcare

quirónsalud

Biopsy Diagnosis

Institut für Pathologie & Zytologie Troisdorf

Hp H

WESTERN WASHINGTON PATHOLOGY

LUND UNIVERSITY

1

Live Demo

Let the Products Speak for Themselves

2

Mindpeak

Robust Clinical Algorithms in a Nutshell

Outstanding Leadership from AI & Healthcare

We are a team of 25 passionate entrepreneurs, AI experts and health care specialists

Felix Faber

CEO

Founded and IPO'd Bytro (Stillfront; market cap of 1bn€); 2x world champion in robotic soccer

Dr. Tobias Lang

CTO

Established AI-System at Zalando. Researcher in drug discovery. SCR Princeton, PhD at FU Berlin and Prof. Riedmiller's lab (DeepMind).

Marc Päpper

CIO

Masters of Science in Computational Neuroscience at LMU Munich and researcher at UC Berkeley. Invited technical conference speaker.

Dr. Khalid Daifalla (MD)

Chief Pathologist

Former Pathologist at U Erlangen. Expert in the fields of Breast-, Gyn- and Uropathology. MD in Internal Medicine.

Dr. Anil Berger

VP Sales & Marketing

Life sciences and health care expert with track record in B2B sales (medneo, Eurofins, SGS Institut Fresenius) PhD Biochemistry

Dr. Stefan Günther

VP Regulatory & Quality

Regulatory and Quality management history in healthcare with a successful FDA 510k application for AI product.

8

Advisory Board

Prof. Manuel Salto-Tellez

Clinical Professor at Queen's University Belfast of Dentistry and Biomedical Sciences

Prof. Catarina Eloy

Head of the Pathology Department at IPATIMUP, Porto, Portugal

Prof. Markus Tiemann

Pathologist and Managing Director at Institute of Haematopathology Hamburg

Prof. Rajendra Singh

Director Dermatopathology at Northwell Health (USA), founder of PathPresenter

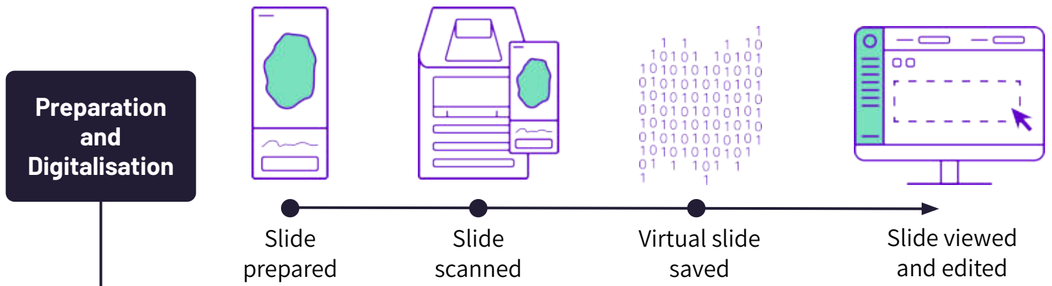
Geoff Baum

VP of Product at Adobe, co-founded Garage Ventures with Guy Kawasaki, U Stanford

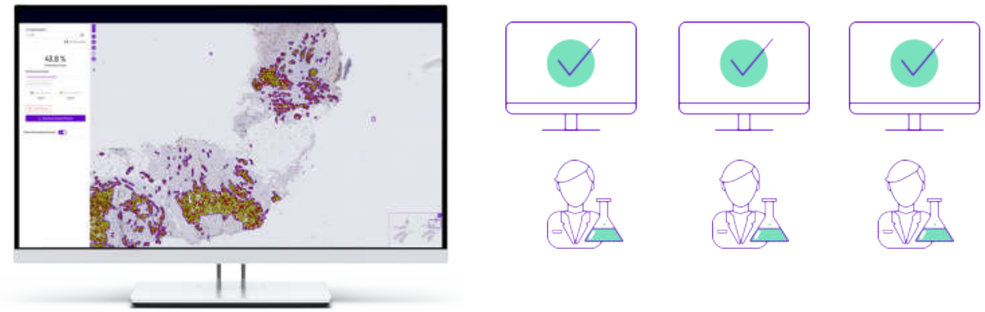
We Have the Most Integrations Globally

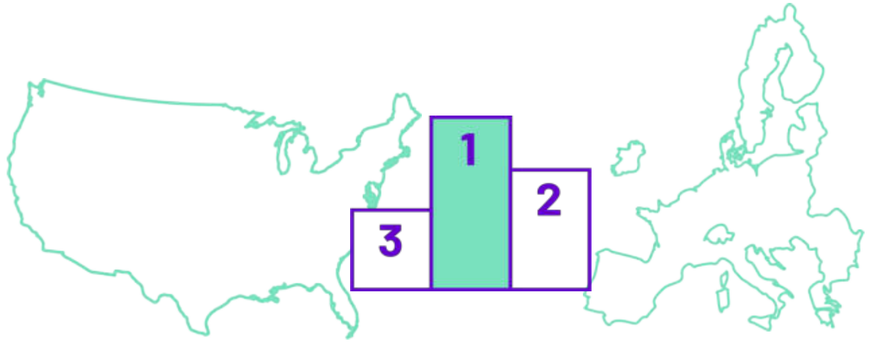
Our Partner Integrations cover 90% of the Market

AI deeply integrated into the workflow



Mindpeak AI integrated into 3rd Party Image Management System





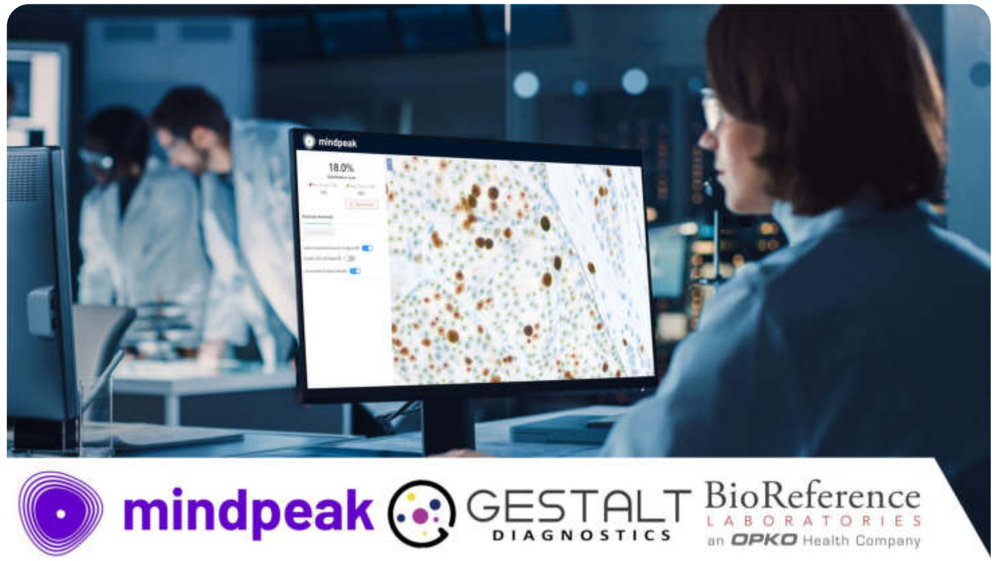
Mindpeak's AI is the most widely integrated AI globally

GESTALT DIAGNOSTICS · Paige · SECTRA · smart in media intelligent software · tribun HEALTH · Crosscope · NEAGEN · Augmentiqs SEE THE SMART PATH · PathPresenter · PHILIPS · inspirata · Telemis · INFINITT Healthcare · PROSCIA · precipoint

Mindpeak's AI was First in US Clinical Routine

Gestalt Diagnostics and MindPeak provide the first Artificial Intelligence based diagnostics solution used in clinical routine pathology in the USA

NEWS PROVIDED BY
Gestalt Diagnostics →
Jan 04, 2022, 09:00 ET



"This makes BreastIHC the first AI-based pathology product to be used in routine clinical practice in the United States."

3

Evidence

“ Fortunately, the Mindpeak‘s AI solution we have in place decreases the **time needed per case by 80% or more**, which allows us to better position ourselves as a reference center for sent-in samples. ”

Unilabs' Chief Medical and Operations Officer,
Dr Christian Rebhan

Unilabs

Robustness by Design









Cases	204 (balanced for clinical scores)
Images	whole-slide images (not small hotspots)
Stainers	3 (Roche, Leica, Dako)
Scanners	6 (Hamamatsu NanoZoomer S360, Leica Aperio GT 450, Roche DP200, 3DHistech P1000, Nikon microscope camera, Philips IntelliSite UFS)
Pathologists	10
Conditions	(1) human (2) human + BreastIHC (1 month washout)
Total number of observations	4080 observations (204 x 10 x 2 diagnoses)

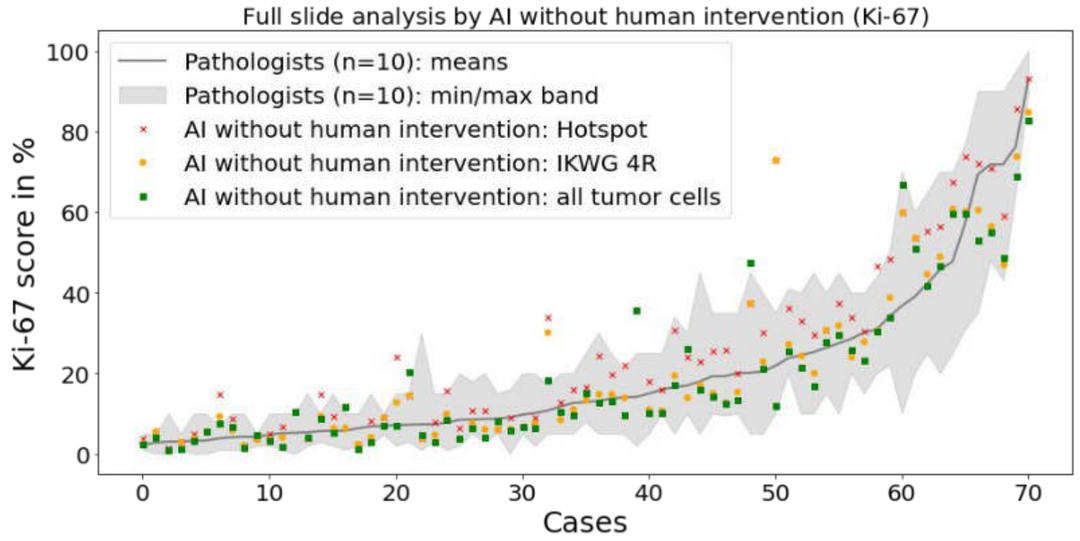
! Even with a free choice of hotspots in both conditions!

Publications

nature: MODERN PATHOLOGY

Publication pending:

Non-inferiority of AI-assisted analysis of Ki-67 and ER/PR in breast cancer routine diagnostics



USCAP

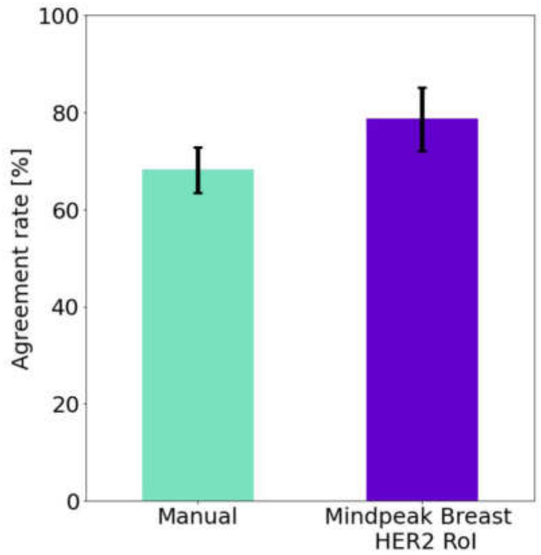
Accepted Abstracts @ USCAP 2023

1. Ki-67 and ER/PR in breast cancer routine diagnostics [UK Erlangen]
2. AI in combination with the global counting methodology by the International Ki-67 in Breast Cancer Working Group identifies more patients eligible for treatment and increases diagnostic speed by 8x. [Unilabs]
3. HER2low concordance

HER2(low) - World-Class Algorithm (CE-IVD)

Mindpeak Breast HER2 RoI (CE-IVD)

- Clinical Performance Evaluation
- 3 labs, 3 stainers, 4 scanners
- mAbs: 4B5, EP3, A0485
- inter-reader agreement
  - humans alone: 68 %
  - humans + AI: 79 %

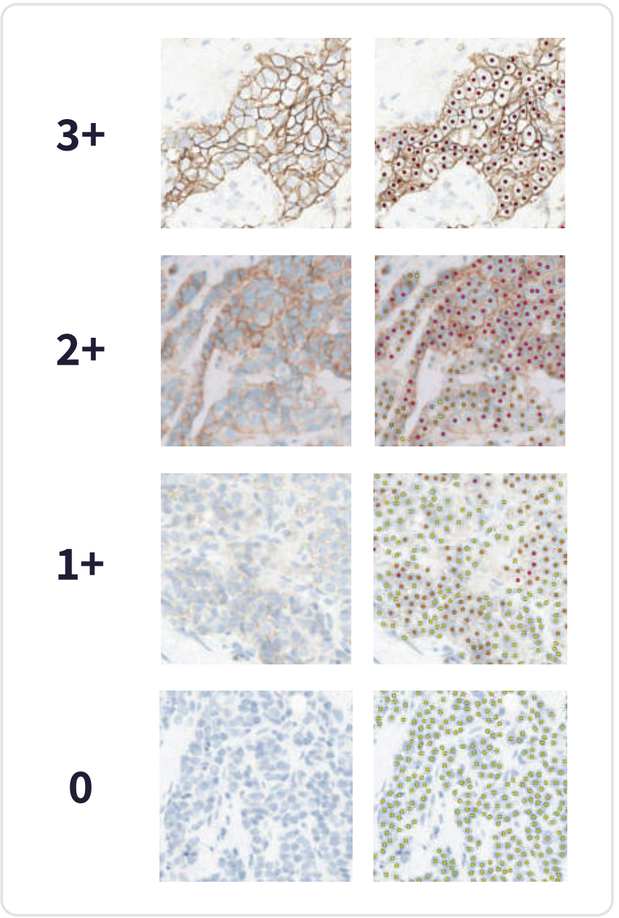


Study: HER2

- **- strictly confidential under NDA -**
- (N = 100, AI unattended)
- concordance vs. ground truth: 100 %

Study: HER2low

- **- strictly confidential under NDA -**
- (N = 200, 12 pathologists, 1 reference expert)
- only 0 and 1+ cases
- human concordance vs. reference: 68 % vs.
- human+AI concordance vs. reference: 73.1 %



Mindpeak Lung (NSCLC) PD-L1 SP263 passes German Digital Readout Test for SP263 IVD (Roche Ventana)

Trial conducted on 12 samples **stained at independent lab**

Whole slide AI results **without human intervention** submitted

German Ring Trial Digital Readout Test passed with **92% concordance**

PD-L1 (NSCLC) **Score 0.92**

AI \ GT	0	1	2
0	4	0	0
1	0	3	1
2	0	0	4

	Lung (NSCLC)
0	< 1 %
1	1%-49%
2	>=50%

mindpeak

Get in touch

@ anil.berger@mindpeak.ai

+49 162 3516390

Dr. Anil Berger

Mindpeak GmbH
Zirkusweg 2
20359 Hamburg
Germany

T: +49 40 35676797
E: info@mindpeak.ai
www.mindpeak.ai