

DovaVision™ UC

AI-Powered Endoscopy Analysis for Actionable Ulcerative Colitis (UC) Insights

DovaVision™ UC uses advanced AI to automate scoring and rapidly analyze ulcerative colitis disease severity from endoscopy videos. Designed for both research and clinical studies, it ensures enriched, consistent, objective, and efficient evaluation of UC.



Dynamic Frame-Level Analysis

Generate dynamic severity analysis across the full procedure — available as raw data for further analysis and intuitive visual outputs.



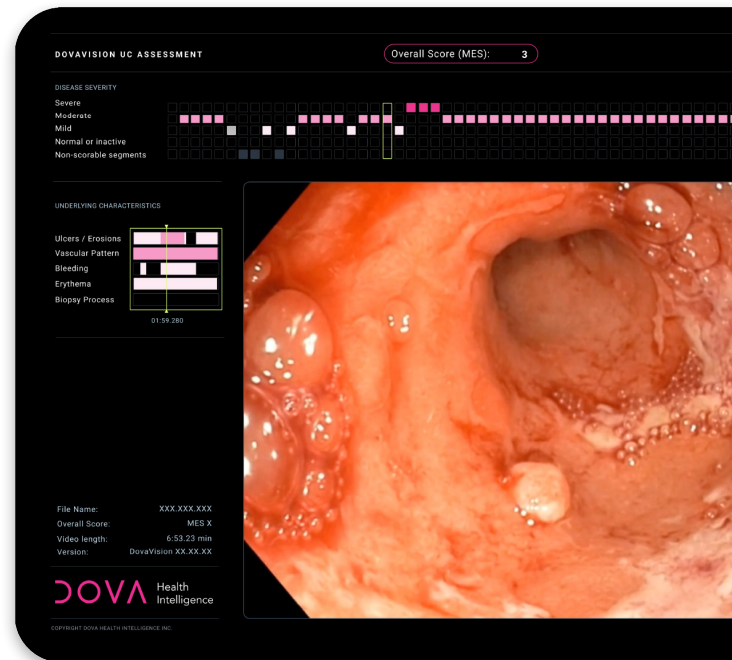
Granular Disease Evaluation

Quantify subtle variations in inflammation, ulceration, and other disease markers across different regions of the colon.



Deep Feature Mapping

Analyze disease features that underpin scoring, enhancing precision and transparency of disease grading.



Detect nuanced changes in disease activity

DovaVision™ UC's explainable AI enables interpretability to reveal subtle patterns and changes in disease activity that the human eye may miss. These insights power more informed decisions in both clinical development and post-marketing strategies.

Proactively ensure data quality and consistency

Automatically flag low-quality videos to enable earlier issue trending and mitigation actions across sites to reduce costly post-trial corrections. DovaVision™ UC drives proactive oversight from day one.

Scale without increasing manual workload

Automated video analysis runs in parallel with clinical trial workflows, reducing human burden and enabling seamless deployment across multi-center, global studies.

Standardized, deterministic scoring you can trust

DovaVision™ UC delivers consistent AI-powered assessments — ensuring the same result for the same input, every time. This supports reliable, trial-wide data integrity.



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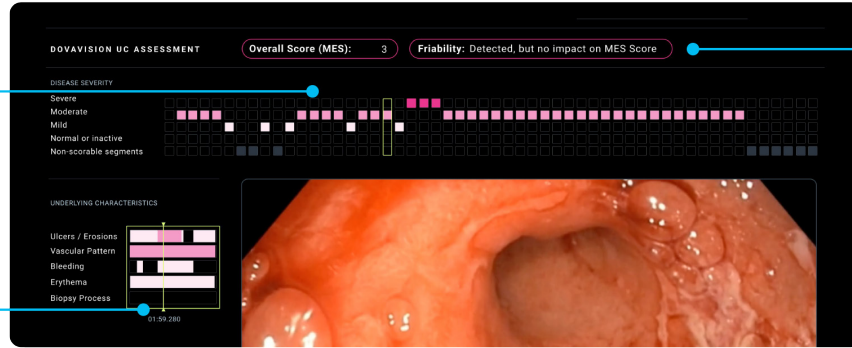
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Reporting Overview

Video Data Visualization

Frame-Level Disease Severity Score

5-10 sec frame-level scoring across the endoscopy procedure



Video-Level MES Score

MES score for the procedure, equivalent to the human MES assessment of the video

Frame-Level Sub-score

components drill-down detail information about components underpinning MES score

JSON Data Output

```
{
  "video": "video1",
  "mes_score": 3,
  "lesion_score": {
    "total": 7,
    "vascular_pattern": 2,
    "bleeding": 2,
    "ulcers_erosions": 2
  },
  "interpretability": {
    "marked Erythema",
    "Absent Vascular Pattern",
    "Spontaneous Bleeding",
    "Superficial Ulcers",
    "Friability detected, but no impact on MES score"
  },
  "severity_grading": [{"frame_id": 10, "severity": 0}],
  "not_scorable": 7186686121382974,
  "frame_predictions": {
    "qc": [{"frame_id": 10, "erythema": 1, "vascular_pattern": 2, "bleeding": 1, "ulcers_erosions": 2, "biopsy_process": 0, "scorable": 1}]
  },
  "friability": {
    "video_lv1": true,
    "scaled_attn": {"0": 0.0015520407213507205, "4": 0.0013866554945707321, "8": 0.001695775892585516}
  },
  "version": "1.7.4"
}
```

Video-Level Interpretability

Interpretability of the MES score for the entire video

Industry-Leading Performance

Built on 108 million expertly annotated labels, DovaVision™ UC delivers industry-leading performance with an ICC of 0.773, and a QWK of 0.769. DovaVision™ UC also achieves a binary classification accuracy of 93.2% (MES 0&1 vs MES 2&3).

Embedded Quality Control

Automated checks on ingestion flag anomalies such as artifacts, lighting issues, and unscorable segments, ensuring only high-quality, consistent data proceeds to analysis.

Secure and Scalable Analysis via API

Robust authentication and authorization safeguards protect patient data while enabling seamless integration into your existing workflows. Designed for scalability, our API delivers high-throughput, reliable analysis.

Optimized for Modern Video Standards

DovaVision™ UC supports video inputs at a minimum of 720p resolution and 8 Mbps bitrate, to support granular AI-powered evaluation.

