Volition Nu.Q® NETs. H3.1 evidence base *2020 to 2026*

Basic science, models and assay above the line. Sepsis cohorts below the line. Beyond sepsis bottom row.

2023. Garcia et al.
Critical Care

Histone neutralisation reduces vasopressor need, IL-6 and H3.1 in septic sheep.

2023. Cayford et al.
Cayford et al

Understanding NETosis Priming and Induction through Nucleosome Changes and Real-Time Monitoring in Isolated Neutrophils and in an Ex-Vivo Model.

2024. Zukas et al.
Zukas et al

First whole-blood ex vivo NETosis model. Three physiological triggers required.

384-well throughput.

2024. Atteberry et al.
Atteberry et al

ATAC-Seq maps chromatin opening during PMA-induced NETosis.

2025. Retter, Singer, Annane.
Retter et al

The NET effect - NETs as a central component of the dysregulated host response in sepsis.

2025.Cayford et al
Cayford et al

Underscores the importance of studying NET formation within a whole blood environment to capture the complexity of neutrophil responses and immune cell interactions.

2025. Wargnies et al.
Wargnies et al

Validated chemiluminescent immunoassay for circulating H3.1 nucleosomes.

Fully automated. IDS-i10. CE-IVDD.

2026. Cayford et al.
Cayford et al

Cytokine-induced chromatin accessibility in whole-blood neutrophils links to sepsis transcriptional states.

ATAC-Seq with 5 NFs.

2021 | 2022 | 2023 | 2024 | 2025 | 2026

2021. Cavalier et al.
Cavalier et al

H3.1 and citrullinated nucleosomes rise with COVID-19 severity.

Two cohorts. BE (93 subjects) and DE (52 subjects)

Retrospective Analysis

2022. Morimont et al.
Morimont et al

Nu.Q H3.1 separates septic shock from critical COVID-19.

46 septic shock. 22 COVID. 48 controls. BE

Observational Study

2023. Haem Rahimi et al.
Rahimi el al

H3.1 peaks at admission in septic shock. Independent predictor of day 5 and 28 mortality.

151 patients. Median 1515 ng per mL day 1. Fr.

Retrospective Analysis

2025. Neumann et al.
Critical Care Medicine (accepted)

Admission H3.1 independently predicts 28-day mortality and 28-day RRT.

971 patients. 33 ICUs. Adj HR 1.80. DE multi-center

Retrospective Analysis

2025. Filippini et al.
Filippini et al

H3.1 separates sepsis from non-sepsis. Predicts RRT independent of mortality.

MARS. 1,713 patients. HR 2.00 per log10. NL multi-center

Observational Study

2025. Kotronoulas et al.
DXOCRO. Manuscript in prog.

H3.1 with lactate and creatinine predicts ED sepsis. Independent of routine markers.

832 participants. AUC 0.865. NRI 0.383. US multi-center

Prospective Study

2026. Retter et al.
DETECSEPS threshold. Internal.

IVDR normal range 38 ng per mL. Lower discharge cut-off from 100 to 50.

234 healthy donors plus DXOCRO.

2020. Bouvier et al. Pre-eclampsia
J Thromb Haemost

Nucleosomes and free DNA rise in pre-eclampsia. Distinct profile from IUGR.

115 women. 3 groups. Fr.

2024. Park et al. Stroke.
Blood Research

Plasma H3.1 elevated in acute ischemic stroke. Independent risk factor.

89 AIS plus 20 controls. AUC 0.907. Korea.

2025. Navarro et al. Trauma.
Shock

H3.1 and citrullinated H3R8 elevated after trauma. Higher in patients who develop VTE.

674 patients. H3.1 830.9 vs 259.2 in VTE. Mayo Clinic.

Coming readouts.

July 2026. RHU Records **Sept 2026 launch** DETECSEPS