Horizon Europe Cluster 1 2026-2027

We have sorted the calls for projects from Horizon Europe Cluster 1 2026-2027 according to the impact that microfluidics can have on the calls for projects and related topics. We are sharing our analysis in case it can help you with project funding efforts. And, of course, if our expertise can be of use to you, we would be delighted to discuss it further.

How to read the stars in terms of % of microfluidic technologies' relevance for the call:

By microfluidic relevance, we mean the relevance of using microfluidic technologies for the topic cited. But also, to a lesser extent, what a microfluidic laboratory or SME could contribute to the topic (mainly for calls with low relevance to microfluidic technologies).

Relevance (%)	90-100	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	0-9
Relevance (*)	*****	****	***	**	*	–	– –	– – –	– – – –	– – – – –

Quick microfluidic priority shortlist (ranked by relevance)

1. **HORIZON-HLTH-2027-02-IND-02 - PORTABLE AND VERSATILE POINT-OF-CARE DIAGNOSTICS (*****)**. Prime fit for lab-on-chip, sample-to-answer, microfluidic consumables, and manufacturing.
2. **HORIZON-HLTH-2026-01-TOOL-03 - INTEGRATING NEW APPROACH METHODOLOGIES (NAMS) TO ADVANCE BIOMEDICAL RESEARCH AND REGULATORY TESTING (*****)**. Organ-on-chip/microphysiological systems sit at the core.
3. **HORIZON-HLTH-2027-03-TOOL-02 - ADVANCING BIO-PRINTING OF LIVING CELLS FOR REGENERATIVE MEDICINE (****)**. Strong on bioprinting nozzles, controlled micro-flows, cell handling.
4. **HORIZON-HLTH-2027-01-IND-01 - DEVELOPMENT OF CELL-FREE PROTEIN SYNTHESIS PLATFORMS FOR DISCOVERY AND/OR PRODUCTION OF BIOLOGICALS (****)**. Continuous-flow CFPS reactors, droplet screening.
5. **HORIZON-HLTH-2026-01-IND-03 - REGULATORY SCIENCE TO SUPPORT TRANSLATIONAL DEVELOPMENT OF PATIENT-CENTRED HEALTH TECHNOLOGIES (****)**. Microfluidic evidence generation, real-world data, NAMs.
6. **HORIZON-HLTH-2027-02-TOOL-01-two-stage - DEVELOPMENT OF PREDICTIVE BIOMARKERS … USING AI (***)**. Can power multi-analyte on-chip biomarker discovery.
7. **HORIZON-HLTH-2027-01-DISEASE-08 - DEVELOPMENT OF INNOVATIVE ANTIMICROBIALS AGAINST CRITICAL PATHOGENS (***)**. On-chip screening/chemostats, gradient generators.
8. **HORIZON-HLTH-2026-01-DISEASE-04 - DEVELOPMENT OF NOVEL VACCINES FOR VIRAL PATHOGENS WITH EPIDEMIC POTENTIAL (***)**. Microfluidic formulation, nanoparticle QA/QC.
9. **HORIZON-HLTH-2027-01-DISEASE-05/06/07 - ANTIVIRALS & MONOCLONALS (***)**. Droplet microfluidics for library screens; process analytics.
10. **HORIZON-HLTH-2027-01-TOOL-05 - PILOT ACTIONS FOR FOLLOW-ON FUNDING IN REGENERATIVE MEDICINE (***)**. Scale-up of organoids/bioprocesses with microfluidic control.

Administrative dates per call

- **Single-stage 2026 (HORIZON-HLTH-2026-01)** - Opening **10 Feb 2026**, Deadline **16 Apr 2026**.
- **Partnerships 2026/1 (ERDERA)** - Opening **10 Feb 2026**, Deadline **15 Sep 2026**.
- **Partnerships 2026/3 (Pandemic Preparedness Phase 2)** - Opening **10 Feb 2027**, Deadline **13 Apr 2027**.
- **Partnerships 2026/4 (EP PerMed top-up)** - Opening **10 Feb 2026**, Deadline **16 Apr 2026**.
- **Single-stage 2027/1 (HORIZON-HLTH-2027-01)** - Opening **10 Feb 2027**, Deadline **13 Apr 2027**.
- **Two-stage 2027 (HORIZON-HLTH-2027-02)** - Opening **10 Feb 2027**, Deadlines **13 Apr 2027 (1st)**, **22 Sep 2027 (2nd)**.

- **Single-stage 2027/2 (HORIZON-HLTH-2027-03)** - Opening **03 Jun 2027**, Deadline **22 Sep 2027**.

*(Full details for **all** topics are provided below, grouped by call and ordered by decreasing microfluidic relevance within each call.)*

Horizon Europe Cluster 1 2026-2027 Calls

CALL - CLUSTER 1 - HEALTH (SINGLE-STAGE - 2026) · HORIZON-HLTH-2026-01

Opening: 10 Feb 2026 · **Deadline:** 16 Apr 2026.

******* HORIZON-HLTH-2026-01-TOOL-03 - INTEGRATING NEW APPROACH METHODOLOGIES (NAMS) TO ADVANCE BIOMEDICAL RESEARCH & REGULATORY TESTING**

- **Type of action:** RIA
- **Budget (topic, M€):** 50.00 · **Expected:** 5.00-8.00 · **#projects:** 7 · **Budget moyen:** 7 142 857 €.

Scientific summary:

- **Advance/validate NAMs** (e.g., **organ-on-chip**, in-silico) to replace/augment animal testing across biomedical research and regulatory contexts.
- Build **interactive approaches** to develop, test, and **accelerate acceptance** of NAMs.

Why microfluidics:

- **MPS/organ-on-chip** are core NAMs; microfluidics can deliver **standardized platforms**, **inter-lab reproducibility,** and **qualification** packages for regulators.

****** HORIZON-HLTH-2026-01-IND-03 - REGULATORY SCIENCE TO SUPPORT TRANSLATIONAL DEVELOPMENT OF PATIENT-CENTRED HEALTH TECHNOLOGIES**

- **Type:** RIA · **Budget:** 20.00 M€ · **Expected:** 4.00-6.00 M€ · **#projects:** 4 · **Budget moyen:** 5 000 000 €.

Scientific summary:

- Improve regulatory **methodologies** and **evidence frameworks** (including **RWD**, NAMs, AI models) along the lifecycle of non-pharma health technologies (MD, IVD, AI, SoHO).

Why microfluidics:

- Microfluidic devices (diagnostics/organ-chips) are ideal **case studies** to produce **regulatory-grade evidence** and pilot **regulatory sandbox** approaches.

***** HORIZON-HLTH-2026-01-DISEASE-04 - DEVELOPMENT OF NOVEL VACCINES FOR VIRAL PATHOGENS WITH EPIDEMIC POTENTIAL**

- **Type:** RIA · **Budget:** 45.00 M€ · **Expected:** ~10.00 M€ · **#projects:** 5 · **Budget moyen:** 9 000 000 €.

Scientific summary:

- Novel **vaccine candidates** vs epidemic-potential viruses; strong preclinical packages and manufacturability.

Why microfluidics:

- **Microfluidic nanoprecipitation/emulsification** for vaccine formulation, **on-chip QA** and **process analytics**.

***** HORIZON-HLTH-2026-01-DISEASE-11 - UNDERSTANDING SEX/GENDER-SPECIFIC MECHANISMS OF CARDIOVASCULAR DISEASES: DETERMINANTS, RISK FACTORS & PATHWAYS**

- **Type:** RIA · **Budget:** 40.00 M€ · **Expected:** 6.00-7.00 M€ · **#projects:** 6 · **Budget moyen:** 6 666 667 €.

Scientific summary:

- Mechanistic research on **sex/gender differences** in CVD: determinants, risk factors, **biological pathways**.

Why microfluidics:

- **Cardiac/vascular-on-chip** to dissect sex-specific responses under controlled hemodynamics and **omics** sampling.

**** HORIZON-HLTH-2026-01-DISEASE-03 - ADVANCING RESEARCH ON PREVENTION, DIAGNOSIS & MANAGEMENT OF POST-INFECTION LONG-TERM CONDITIONS**

- **Type:** RIA · **Budget:** 40.00 M€ · **Expected:** 6.00-8.00 M€ · **#projects:** 5 · **Budget moyen:** 8 000 000 €.

Scientific summary :

- Mechanistic, diagnostic, and management strategies for **post-infection long-term conditions**.

Why microfluidics:

- **Multiplex POC** panels for inflammatory/metabolic markers; **on-chip models** for persistence and host response.

– HORIZON-HLTH-2026-01-DISEASE-15 - SCALING UP INNOVATION IN CARDIOVASCULAR HEALTH (CSA)

- **Type:** CSA · **Budget:** 2.00 M€ · **Expected:** ~2.00 M€ · **#projects:** 1 · **Budget moyen:** 2 000 000 €.

Scientific summary:

- Map gaps/solutions, develop **SRIA**, events, and capacity for personalized **CVD** prediction, screening, and prevention (links to **VHT**, genomics, EHDS).

Why microfluidics:

- Potential role as **technology stakeholder** (diagnostic biomarkers, organ-chips); not a device RIA.

– HORIZON-HLTH-2026-01-ENVHLTH-01 - TOWARDS A BETTER UNDERSTANDING & ANTICIPATION OF THE IMPACTS OF CLIMATE CHANGE ON HEALTH

- **Type:** RIA · **Budget:** 55.00 M€ · **Expected:** 7.00-8.00 M€ · **#projects:** 7 · **Budget moyen:** 7 857 143 €.

Scientific summary :

- Three broad foci (heat/environmental stress; extreme events; **infectious diseases**). Includes **diagnostic capacity**, rapid/portable **standardized** testing that can withstand climate extremes.

Why microfluidics:

- Opportunity in **robust fieldable diagnostics** and **sample prep** modules for climate-sensitive pathogens.

– HORIZON-HLTH-2026-01-ENVHLTH-04 - TOWARDS CLIMATE-RESILIENT, PREPARED & CARBON-NEUTRAL POPULATIONS AND HEALTHCARE SYSTEMS

- **Type:** RIA · **Budget:** 50.00 M€ · **Expected:** 7.00-8.00 M€ · **#projects:** 7 · **Budget moyen:** 7 142 857 €.

Scientific summary:

- System-level **resilience** and **preparedness** of populations/health systems under climate stress.

Why microfluidics:

- Possible role via **low-power diagnostics** and **decentralized testing** kits in resilience toolkits.

– HORIZON-HLTH-2026-01-CARE-03 - IDENTIFYING & ADDRESSING LOW-VALUE CARE IN HEALTH & CARE SYSTEMS

- **Type:** RIA · **Budget:** 45.00 M€ · **Expected:** ~10.00 M€ · **#projects:** 5 · **Budget moyen:** 9 000 000 €.

Scientific summary:

- Metrics, indicators, and **interventions** to reduce **low-value care**; implementation and policy levers.

Why microfluidics:

- Indirect: opportunities where **POC diagnostics** reduce unnecessary imaging/labs or support **de-prescribing**.

--- HORIZON-HLTH-2026-01-DISEASE-09 - MULTISECTORAL APPROACH TO TACKLE CHRONIC NCDs BEYOND HEALTHCARE (GACD)

- **Type:** RIA · **Budget:** 12.00 M€ · **Expected:** 3.00-4.00 M€ · **#projects:** 3 · **Budget moyen:** 4 000 000 €.

Scientific summary:

- **Implementation research** spanning sectors/settings outside the clinic.

Why microfluidics:

- Possible **community-level testing** pilots; still peripheral.

---- HORIZON-HLTH-2026-01-STAYHLTH-02 - BEHAVIOURAL INTERVENTIONS AS PRIMARY PREVENTION FOR NCDs AMONG YOUNG PEOPLE

- **Type:** RIA · **Budget:** 21.00 M€ · **Expected:** 9.00-10.00 M€ · **#projects:** 2 · **Budget moyen:** 10 500 000 €.

Scientific summary:

- Implement **evidence-based behavioral interventions** (ages 12–25); **self-monitoring** with wearables/POC devices, RWD/AI, policy-linked deployment.

Why microfluidics:

- Peripheral role (consumer-grade sensors dominate).

---- HORIZON-HLTH-2026-01-ENVHLTH-05 - SUPPORT FOR A MULTILATERAL INITIATIVE ON CLIMATE CHANGE & HEALTH RESEARCH (CSA)

- **Type:** CSA · **Budget:** 3.00 M€ · **Expected:** ~3.00 M€ · **#projects:** 1 · **Budget moyen:** 3 000 000 €.

Scientific summary:

- Coordination/support for **multilateral climate-health** research agenda.

Why microfluidics:

- Non-technical CSA; MIC's role limited to stakeholder input.

---- HORIZON-HLTH-2026-01-CARE-01 - PUBLIC PROCUREMENT OF INNOVATIVE SOLUTIONS FOR INTEGRATED & PERSONALISED ACCESS TO HEALTHCARE (PPI)

- **Type:** PPI · **Budget:** 25.00 M€ · **Expected:** 3.00-8.00 M€ · **#projects:** 4 · **Budget moyen:** 6 250 000 €.

Scientific summary:

- Demand-side **innovation procurement** for integrated/personalized access solutions.

Why microfluidics:

- Microfluidics only if procurers define diagnostic needs; otherwise, peripheral.

----- HORIZON-HLTH-2026-01-DISEASE-02 - INNOVATIVE INTERVENTIONS TO PREVENT HARMFUL EFFECTS OF DIGITAL TECHNOLOGIES ON MENTAL HEALTH OF CHILDREN/YOUNG ADULTS

- **Type:** RIA · **Budget:** 45.00 M€ · **Expected:** ~8.00 M€ · **#projects:** 6 · **Budget moyen:** 7 500 000 €.

Scientific summary:

- Prevention strategies addressing mental-health harms of **digital tech** among youth.

Why microfluidics:

- Outside microfluidic scope.

CALL - CLUSTER 1 - HEALTH (TWO-STAGE - 2027) · HORIZON-HLTH-2027-02

Opening: 10 Feb 2027 · **Deadlines:** 13 Apr 2027 (1st stage), 22 Sep 2027 (2nd stage).

******* HORIZON-HLTH-2027-02-IND-02 - PORTABLE AND VERSATILE POINT-OF-CARE DIAGNOSTICS**

- **Type of action:** IA
- **Call:** Cluster 1 - Health (Two-stage - 2027)
- **Budget (topic, M€):** 40.00
- **Expected EU contribution per project (M€):** 5.00-7.00
- **Estimated number of projects granted:** 6
- **Average budget per project (€):** 6 666 667 € (40.00 M€ × 1 000 000 / 6).

Scientific summary:

- Push PoC diagnostics that are **more sensitive, specific, robust, and easy-to-use**, addressing false results and cumbersome sample prep.
- Align with **WHO REASSURED** criteria; emphasize **sample-to-answer**, miniaturization, versatility of specimen types, manufacturability, high-throughput readiness, quality control, and regulatory compliance.
- Integrate **mobile technologies** and **ML/AI** for data acquisition/analysis; ensure suitability for resource-limited settings.
- Applicable to **infectious and non-communicable** disease testing and longitudinal monitoring.

Why microfluidics:

- Lab-on-chip **sample prep + detection** (nucleic acid, protein, cell) to achieve **REASSURED** and **sample-to-answer**.
- **Droplet** and **paper microfluidics** for multiplexing and low-cost disposables; on-chip **isothermal amplification**; integrated **solid-phase extraction**.
- Design-for-manufacture of microfluidic cartridges; **scalability** to injection-moulded/roll-to-roll parts.
- Embedded **sensors** and **on-chip QC** to reduce false negatives/positives; **connectivity** for readouts.
- MICROFLUIDIC can supply **prototype-to-pilot** platforms meeting **regulatory** and **quality** needs in the IA frame.

***** HORIZON-HLTH-2027-02-TOOL-01-two-stage - DEVELOPMENT OF PREDICTIVE BIOMARKERS OF DISEASE PROGRESSION AND TREATMENT RESPONSE BY USING AI (CHRONIC NCDs)**

- **Type of action:** RIA
- **Call:** Cluster 1 - Health (Two-stage - 2027)
- **Budget (topic, M€):** 45.00
- **Expected EU contribution per project (M€):** 6.00-8.00
- **Estimated number of projects granted:** 6
- **Average budget per project (€):** 7 500 000 €.

Scientific summary:

- AI-driven discovery/validation of **predictive biomarkers** of progression/response in chronic NCDs.
- Leverage **multimodal data** (omics, imaging, clinical, sensor-derived), **RWD**, privacy/security-by-design.
- Emphasis on **robust, generalizable** models and **clinical utility** supporting precision prevention/treatment.

Why microfluidics:

- **Multiplexed microfluidic assays** (exosomes, cytokines, cfDNA) generate high-quality biosignatures for AI pipelines.
- **Single-cell** and **organ-on-chip** enable **functional biomarkers** under controlled microenvironments.
- MICROFLUIDIC can provide **standardized sample-to-AI** workflows and validated cartridge-based tests.

– HORIZON-HLTH-2027-02-DISEASE-01-two-stage - INNOVATIVE HEALTHCARE INTERVENTIONS FOR NON-COMMUNICABLE DISEASES

- **Type of action:** RIA
- **Budget (topic, M€):** 65.00
- **Expected EU contribution per project (M€):** 7.00-8.00
- **Estimated number of projects granted:** 8
- **Average budget per project (€):** 8 125 000 €.

Scientific summary:

- Design, test, and validate **innovative interventions** for high-burden NCDs; strong clinical and implementation focus.
- Incorporate **precision, prevention**, risk stratification, and-patient-centred outcomes.

Why microfluidics:

- Niche contribution via **point-of-need tests** to enable stratification/monitoring within intervention studies.
- Less direct if interventions are behavioral or systemic rather than diagnostic/bioprocess.

--- HORIZON-HLTH-2027-02-DISEASE-14-two-stage - CLINICAL TRIALS FOR ADVANCING INNOVATIVE INTERVENTIONS FOR NEURODEGENERATIVE DISEASES

- **Type of action:** RIA
- **Budget (topic, M€):** 40.00
- **Expected EU contribution per project (M€):** ~10.00
- **Estimated number of projects granted:** 4
- **Average budget per project (€):** 10 000 000 €.

Scientific summary:

- **Patient-relevant clinical trials** for neurodegenerative disorders; robust endpoints, trial readiness, stratification.

Why microfluidics:

- Limited direct role; possible **CSF/blood biomarker** cartridge development or **in-clinic** monitoring tools.

CALL - CLUSTER 1 - HEALTH (SINGLE-STAGE - 2027/2) · HORIZON-HLTH-2027-03

Opening: 03 Jun 2027 · **Deadline:** 22 Sep 2027.

****** HORIZON-HLTH-2027-03-TOOL-02 - ADVANCING BIO-PRINTING OF LIVING CELLS FOR REGENERATIVE MEDICINE**

- **Type of action:** RIA
- **Budget (topic, M€):** 45.00
- **Expected EU contribution per project (M€):** 7.00-10.00
- **Estimated number of projects granted:** 5
- **Average budget per project (€):** 9 000 000 €.

Scientific summary:

- Advance **bio-printing technologies** and translation for regenerative medicine.
- Quality, viability, function, and **integration of printed constructs**; towards clinically relevant use-cases.

Why microfluidics:

- **Microfluidic printheads** for **coaxial/multimaterial** deposition; **shear-controlled** cell handling.
- Perfusable **micro-vasculature** and **bioreactors** for maturation; **process analytics** inline.

– HORIZON-HLTH-2027-03-TOOL-04 - VIRTUAL HUMAN TWINS (VHTs) FOR INTEGRATED CLINICAL DECISION SUPPORT IN PREVENTION AND DIAGNOSIS

- **Type of action:** RIA
- **Budget (topic, M€):** 45.00
- **Expected EU contribution per project (M€):** 10.00-12.00
- **Estimated number of projects granted:** 4
- **Average budget per project (€):** 11 250 000 €.

Scientific summary :

- **Multiscale, multi-organ VHT** solutions; focus on prevention/diagnosis in high-burden diseases; integration into care pathways and with other decision tools.

Why microfluidics:

- Indirect: organ-on-chip data can **parameterize/validate** VHT models; limited core role for microfluidic hardware.

---- HORIZON-HLTH-2027-03-TOOL-08 - TOWARDS ARTIFICIAL GENERAL INTELLIGENCE (AGI) FOR HEALTHCARE (CSA)

- **Type of action:** CSA
- **Budget (topic, M€):** 3.00
- **Expected EU contribution per project (M€):** ~3.00
- **Estimated number of projects granted:** 1
- **Average budget per project (€):** 3 000 000 €.

Scientific summary :

- **Road-mapping/coordination** toward safe, trustworthy AGI for health; standards, ethics, governance.

Why microfluidics:

- Very indirect; possible contribution via **datasets** from microfluidic diagnostics, non-core.

CALL - CLUSTER 1 - HEALTH (SINGLE-STAGE - 2027/1) · HORIZON-HLTH-2027-01

Opening: 10 Feb 2027 · **Deadline:** 13 Apr 2027

****** HORIZON-HLTH-2027-01-IND-01 - DEVELOPMENT OF CELL-FREE PROTEIN SYNTHESIS PLATFORMS FOR DISCOVERY AND/OR PRODUCTION OF BIOLOGICALS**

- **Type of action:** RIA
- **Budget (topic, M€):** 35.00
- **Expected EU contribution per project (M€):** 6.00–8.00
- **Estimated number of projects granted:** 5
- **Average budget per project (€):** 7 000 000 €.

Scientific summary:

- Mature **CFPS platforms** for faster **design-build-test-learn** cycles and scalable production of protein biologics; lower cost and improved scalability/quality.

Why microfluidics:

- **Continuous-flow** and **droplet CFPS** reactors for rapid prototyping and mini-biomanufacturing.
- Inline **process monitoring** and **automated screening** of variants; integration with downstream analytics.

***** HORIZON-HLTH-2027-01-DISEASE-08 - DEVELOPMENT OF INNOVATIVE ANTIMICROBIALS AGAINST CRITICAL PATHOGENS RESISTANT TO ANTIMICROBIALS**

- **Type of action:** RIA · **Budget:** 45.00 M€ · **Expected:** 8.00-10.00 M€ · **#projects:** 5 · **Budget moyen:** 9 000 000 €.

Scientific summary:

- Discovery/optimization of **antibacterials** vs critical resistant pathogens; robust pre-clinical packages.

Why microfluidics:

- **On-chip chemostats/gradients** for MBC determination and resistance evolution studies; **HT screens** in droplets.

***** HORIZON-HLTH-2027-01-DISEASE-05 - BROAD-SPECTRUM SMALL-MOLECULE ANTIVIRALS (EPIDEMIC POTENTIAL)**

- **Type of action:** RIA · **Budget:** 45.00 M€ · **Expected:** ~10.00 M€ · **#projects:** 5 · **Budget moyen:** 9 000 000 €.

Scientific summary:

- **First-in-class broad-spectrum** antivirals; preclinical/PK-PD, resistance, potency vs priority viruses.

Why microfluidics:

- **Microreactor synthesis** and **droplet assays** for fast SAR; **on-chip infection models** enhance throughput.

***** HORIZON-HLTH-2027-01-DISEASE-06 - MONOCLONAL ANTIBODIES TO PREVENT/TREAT INFECTIONS FROM FLAVIVIRIDAE**

- **Type of action:** RIA · **Budget:** 45.00 M€ · **Expected:** ~10.00 M€ · **#projects:** 5 · **Budget moyen:** 9 000 000 €.

Scientific summary:

- Discovery/engineering and **preclinical development** of mAbs against **Flaviviridae**.

Why microfluidics:

- **Single-cell** antibody discovery, **droplet** screening, **micro-bioprocess** analytics for manufacturability.

***** HORIZON-HLTH-2027-01-DISEASE-07 - MONOCLONAL ANTIBODIES TO PREVENT/TREAT INFECTIONS FROM FILO-, NAIRO-, PHENUI-, PICORNA- & TOGA VIRIDAE**

- **Type of action:** RIA · **Budget:** 45.00 M€ · **Expected:** ~10.00 M€ · **#projects:** 5 · **Budget moyen:** 9 000 000 €.

Scientific summary:

- As above, for **additional viral families**; breadth/neutralization, escape management.

Why microfluidics:

- Same microfluidic value chain: **HT single-cell** recovery, **affinity**/function screens on-chip, **Qc**.

***** HORIZON-HLTH-2027-01-TOOL-05 - PILOT ACTIONS FOR FOLLOW-ON FUNDING: REGENERATIVE MEDICINE**

- **Type of action:** IA · **Budget:** 40.00 M€ · **Expected:** 6.00-8.00 M€ · **#projects:** 5 · **Budget moyen:** 8 000 000 €.

Scientific summary:

- **Translate/scale** promising EU-funded regenerative medicine outputs; manufacturing readiness, clinical adoption, ecosystems.

Why microfluidics:

- **Perfusion bioreactors**, **controlled microenvironments**, and **inline sensing** to scale cell/tissue products; microfluidics can de-risk **CMC**.

**** HORIZON-HLTH-2027-01-CARE-02 - PERSONALISED APPROACHES TO REDUCE RISKS FROM ADVERSE DRUG REACTIONS DUE TO MULTIPLE MEDICATIONS**

- **Type of action:** RIA · **Budget:** 45.00 M€ · **Expected:** 8.00-10.00 M€ · **#projects:** 5 · **Budget moyen:** 9 000 000 €.

Scientific summary:

- Personalised strategies to mitigate **ADRs in polypharmacy**; pharmacogenomics, tools, care models.

Why microfluidics:

- **Point-of-care TDM** chips and **metabolite** panels; **organ-on-chip** for **DDI** risk profiling.

*** HORIZON-HLTH-2027-01-ENVHLTH-MISSCLIMA-03 - TOOLS & TECHNOLOGIES TO SUPPORT HEALTH ADAPTATION TO CLIMATE CHANGE (PCP)**

- **Type of action:** PCP · **Budget:** 20.00 M€ · **Expected:** 4.00-5.00 M€ · **#projects:** 4 · **Budget moyen:** 5 000 000 €.

Scientific summary:

- **Pre-commercial procurement** of tools for climate-health adaptation (surveillance, decision support).

Why microfluidics:

- Potential for **fieldable biosensors/sample prep** modules in surveillance kits; role depends on procurers' specs.

– HORIZON-HLTH-2027-01-ENVHLTH-02 - INTEGRATING CLIMATE-RELATED EXPOSURES INTO THE HUMAN EXPOSOME

- **Type of action:** RIA · **Budget:** 42.00 M€ · **Expected:** 10.00-11.00 M€ · **#projects:** 4 · **Budget moyen:** 10 500 000 €.

Scientific summary:

- Integrate **climate exposures** into the **human exposome**; advanced **measurement pipelines** and **data integration**.

Why microfluidics:

- **Wearable/microfluidic samplers** and **multi-analyte chips** to capture exposures at high temporal resolution.

--- HORIZON-HLTH-2027-01-DISEASE-10 - PREVENTION & MANAGEMENT OF NCDs IN CHILDREN & YOUNG PEOPLE (GACD)

- **Type of action:** RIA · **Budget:** 12.00 M€ · **Expected:** 3.00-4.00 M€ · **#projects:** 3 · **Budget moyen:** 4 000 000 €.

Scientific summary:

- Implementation research for **NCDs in youth** with **GACD** cooperation.

Why microfluidics:

- Marginal; possible **home-sampling** devices for monitoring, but social/behavioral focus dominates.

---- HORIZON-HLTH-2027-01-STAYHLTH-01 - ADDRESSING DISABILITIES THROUGH THE LIFE COURSE TO SUPPORT INDEPENDENT LIVING & INCLUSION

- **Type of action:** RIA · **Budget:** 40.00 M€ · **Expected:** 6.00-8.00 M€ · **#projects:** 5 · **Budget moyen:** 8 000 000 €.

Scientific summary:

- Develop **inclusive care models**, person-centred solutions for independent living; strong **SSH** and stakeholder co-creation.

Why microfluidics:

- Out of microfluidic core; at most **assistive biosensors** in specific use-cases.

CALL - PARTNERSHIPS IN HEALTH (2026/3) · HORIZON-HLTH-2026-03

Opening: 10 Feb 2027 · **Deadline:** 13 Apr 2027.

– HORIZON-HLTH-2026-03-DISEASE-13 - EUROPEAN PARTNERSHIP FOR PANDEMIC PREPAREDNESS (PHASE 2)

- **Type:** Co-funded European Partnership
- **Budget (topic, M€):** 40.00 (2026) + 33.00 (2027) = 73.00
- **Estimated number of projects granted:** 1

Scientific summary:

- Co-funded partnership to coordinate **pandemic preparedness** R&I agendas and national co-funding.

Why microfluidics:

- Potential inclusion in **countermeasure** testbeds (rapid diagnostics, on-chip surveillance).

CALL - PARTNERSHIPS IN HEALTH (2026/1) · HORIZON-HLTH-2026-02

Opening: 10 Feb 2026 · **Deadline:** 15 Sep 2026.

-- HORIZON-HLTH-2026-02-DISEASE-12 - EUROPEAN PARTNERSHIP ON RARE DISEASES (ERDERA) (PHASE 2) (COFUND)

- **Type:** COFUND
- **Budget (topic, M€):** 30.00 (2026) + 63.00 (2027) = 93.00
- **Estimated number of projects granted:** ~93 (across the Partnership)
- **Average budget per project (€):** 1 000 000 €

Scientific summary:

- COFUND for **rare-disease** transnational projects; portfolio-type funding.

Why microfluidics:

- Targeted contributions in **rare-disease diagnostics** (ultra-low-sample assays, single-cell chips).

CALL - PARTNERSHIPS IN HEALTH (2026/4) · HORIZON-HLTH-2026-04

Opening: 10 Feb 2026 · **Deadline:** 16 Apr 2026.

-- HORIZON-HLTH-2026-04-CARE-04 - ENHANCING & ENLARGING THE EUROPEAN PARTNERSHIP ON PERSONALISED MEDICINE (EP PerMed) (TOP-UP) (COFUND)

- **Type:** COFUND
- **Budget (topic, M€):** 15.00

- **Expected EU contribution per project (M€):** ~15.00
- **Estimated number of projects granted:** 1

Scientific summary:

- **Top-up** to EP PerMed to enhance/enlarge personalized medicine activities.

Why microfluidics:

- Microfluidic **precision diagnostics** and **organoid-on-chip** can feed PM pipelines; governance/portfolio focus is indirect.

DISEASE-FOCUSED TOPICS (ADDITIONAL DETAILS)

(Already placed above within their calls; scope pointers here for completeness and traceability):

- **DISEASE-05/06/07/08** virology/AMR topic scopes and expected outcomes are detailed in the topic list with specific families/targets; all use RIA frames with 45.00 M€ topic budgets and ~5 projects.
- **DISEASE-03** post-infection long-term conditions mix mechanistic and translational work.
- **DISEASE-11** emphasizes sex/gender-specific mechanisms and risk pathways in CVD.

ENVIRONMENT & CLIMATE HEALTH TOPICS (ADDITIONAL DETAILS)

- **ENVHLTH-01** explicitly calls for **rapid, portable** diagnostics that can **withstand climate extremes**, alongside surveillance and modelling.
- **ENVHLTH-02** focuses on integrating **climate exposures** into the exposome with advanced measurement/data pipelines.