GenLumina

Annual Report 2025

The Foundation - Eliminating cancer cell by cell

GenLumina B.V.
Leiden, The Netherlands
2025 Annual Report

In this Report

CEO Foreword

2025 was a foundation year for GenLumina. We moved from a university spin-out into an operational preclinical oncology company with access to core intellectual property, a functional laboratory base in Leiden, early non-dilutive and convertible financing, and a focused development strategy.

Our platform is designed to add spatial control to targeted oncology therapies as ADC/PDC are seen as a trend for the coming decade. By combining antibody- or peptide-mediated delivery with local light activation, we aim to create a therapeutic payload that is active only where and when illumination is applied. This approach is intended to improve the therapeutic index of targeted cancer treatment while fitting into existing surgical, endoscopic and image-guided oncology workflows.

During the year, we deliberately invested in the foundations needed to generate credible and reproducible data: equipment, laboratory capacity, analytical methods, scientific manpower and external development planning. We also sharpened our lead indication strategy, selecting colorectal cancer/EpCAM as the first validation program because of its unmet medical need, procedural accessibility and strong alignment with LUMC collaboration.

Entering 2026, our focus is clear: targeted construct validation, tumor-bearing in vivo proof-of-concept, early safety and biodistribution work, CMC development, regulatory pathway clarification, and structured partnering discussions. These milestones are intended to reduce technical and translational risk and to prepare the company for strategic partnerships and future financing.

We thank our employees, scientific partners, advisors, funders and shareholders for their support in building this foundation. With disciplined execution, strong data and the right alliances, we believe GenLumina can contribute a meaningful new layer to precision oncology.

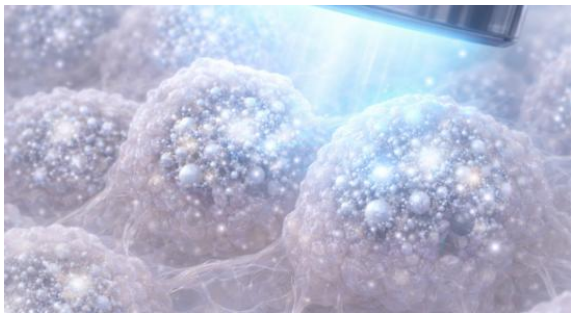
Gerco Kanbier

CEO - Genlumina

Our Company

We eliminate cancer,

cell by cell



GenLumina B.V. is a biotechnology company developing a new class of light-activated cancer therapeutics, designed to function as a payload within precision oncology.

Rather than replacing existing targeting approaches such as antibodies or peptides, GenLumina provides the missing functional component: a therapeutic payload that remains inactive in the body and is only activated at the tumor site using light. This enables precise, localized treatment of cancer cells while minimizing damage to healthy tissue.

At the core of this approach is the proprietary Silver Nanobullets (SnB) platform, based on DNA-encapsulated silver atoms that can be conjugated to targeting molecules. These nanoclusters circulate safely through the body and become therapeutically active only upon exposure to low-intensity safe light. This enables controlled activation within the tumor, eliminating common side-effects due to off-target binding.

Our Mission

At GenLumina, we address the last mile in cancer treatment by enabling light-controlled activation in precision oncology. Our technology is designed to eliminate cancer cells cell by cell, while preserving healthy tissue and reducing systemic toxicity.

By combining targeted delivery with controlled light activation, we aim to complement existing cancer treatment workflows and create a new therapeutic layer that can improve safety, efficacy and clinical outcomes.

Our Vision

We envision a future in which cancer becomes an increasingly treatable disease. By enabling targeting therapies that are activated only at the right place and at the right time, GenLumina aims to contribute to a new standard of care in oncology: treatments that are more precise and designed to reduce side effects, limit recurrence and improve patient outcomes.

Overview 2024-2025

GenLumina progressed from a university spin-out into an operational preclinical oncology company developing a light-activated ADC/PDC payload platform. The company secured access to its core IP, established laboratory operations in Leiden, expanded its scientific team, initiated key collaborations with LUMC and NKI, and selected colorectal cancer/EpCAM as its lead validation program.

Key 2024-2025 achievements include: Business Plan, Financial roadmap, Management Agreements, Incubator programmes Venture Academy (Leiden), UNLOCK_ (Leiden) and IBE (Boston), IP license agreement with Technology Transfer Office (TTO, Luris-Leiden), Leiden University (LEH) as 15% Shareholder, Dutch patent granted, Set up our lab in Bioscience Park Leiden (Biopartner 5, Oegstgeest), set up research team, GL-001 CRC/EpCAM initiated with LUMC, GL-102 HER2 defined as proprietary platform proof-of-concept linker technology, in vivo biodistribution work started, a preclinical drug-development roadmap, UNIIQ convertible loan, Health-Holland grant and investor/partner outreach structure.

Team & Organization

GenLumina expanded its operating capacity in 2025 with a lean and focused team, after successfully completing its pre-seed funding round.

Employees

The company expanded from one grant-writing-focused part-time worker in 2024 to two laboratory workers in 2025, representing approximately 1.5 FTE in the second half of the year. Preclinical research and technology development capabilities were greatly enhanced by this expansion.

Research collaboration

Part of the research was carried out in partnership with Biotech Booster and the Faculty of Science at Leiden University, which provide access to infrastructure, facilities, and specialist knowledge. Additionally, GenLumina collaborates with clinical experts within the Leiden University Medical Center on a subsidised project for tumor targeting. In vivo

studies are conducted together with the National Cancer Institute in Amsterdam.

Specialists and interns

Two part-time outside experts helped the team with prototype development and mass spectrometry analysis. Four interns also assisted with data analysis, early-stage prototyping, and laboratory work

1. Management

De Bruin (CSO) and Kanbier (CEO) are closely involved in the operational day-to-day management of the company, with De Bruin focusing on research activities and Kanbier on business development and finance. Bouwmeester fulfils a strategic coordinating role, focusing on subsidies and funding opportunities, scientific network development, the development of the light-activation prototype for preclinical studies, and oversight of the scientific research programme. Together, the team holds weekly progress meetings to maintain alignment across scientific progress, funding activities and technology development.

D. de Bruin, PhD	J.G. Kanbier	Prof. Dr. D. Bouwmeester
Founding Partner & CSO	*Founding Partner & CEO*	*Founding Partner & Professor Quantum Optics*

2. Advisors

While GenLumina does not yet have an official advisory board, it is supported by individual advisors comprising senior experts in pre-clinical oncology drug development, toxicology, translational research, finance and biotech business development. The advisors provide strategic guidance on scientific validation, partnership strategy, and commercial development.

3. Capability build-out

As GenLumina advances toward GLP and IND/CTA-enabling activities, the company expects to strengthen its capabilities in CMC, regulatory affairs, QA/GMP, translational oncology, device-drug interface strategy and business development. These functions may be built through a combination of hires, advisors, consultants and strategic partners.

Marketing & Strategy

01. Business Model

02. Partnering Logic

03. Platform Strategy

04. Intellectual Property Position

05. Dual Gate Approach

06. Integration with Medical Technologies

07. Lead Indication – Colorectal Cancer

08. Current Pre-clinical Pipeline

09. Key Opinion Leaders

10. Colorectal Cancer Market Opportunity

Market & Strategy

1. Business Model

GenLumina's business model is built around three partnership routes: (1) programme-level licensing of integrated ADC/PDC constructs, (2) payload-platform collaborations where partners contribute antibodies, peptides or targets, and (3) medtech-enabled procedural oncology collaborations for indications where controlled light delivery is already clinically feasible.

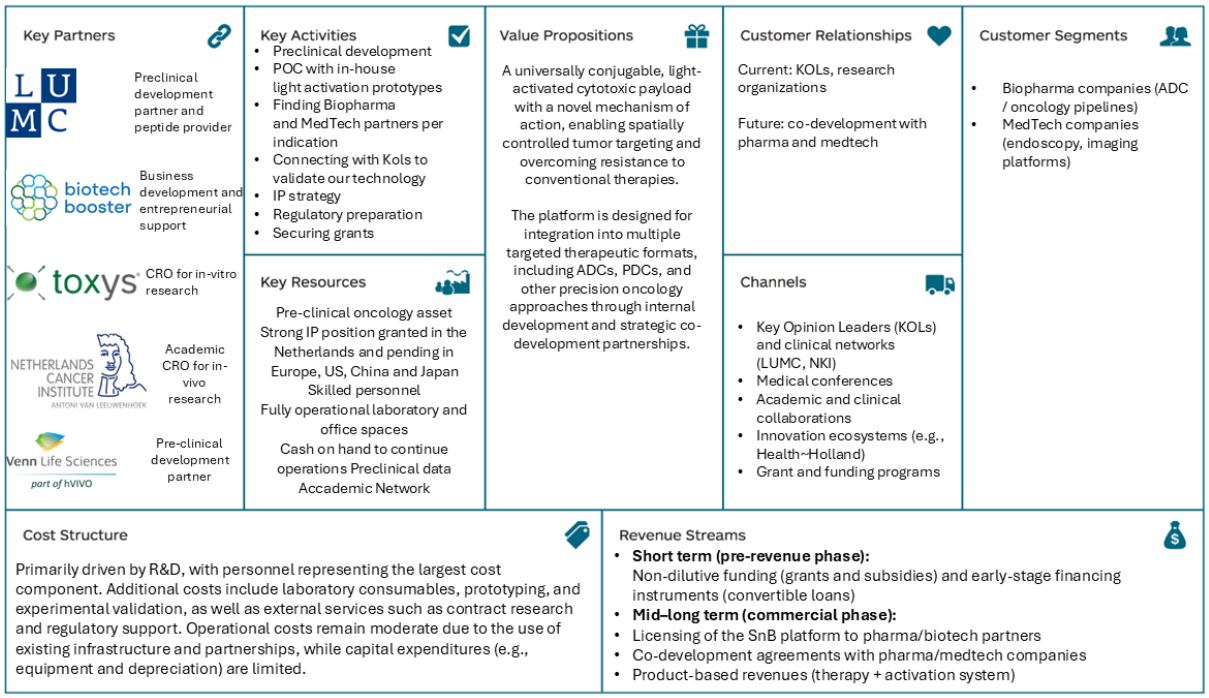
The company develops integrated light-activated therapeutic constructs that combine a targeting moiety with GenLumina's proprietary SnB payload platform and DNA-based linker architecture. Programs may be developed using proprietary or partner-supplied targeting molecules and licensed on an indication-specific basis.

GenLumina intends to retain platform know-how and scientific oversight while leveraging strategic partners for advanced preclinical development, clinical execution, regulatory activities and commercialization. This approach supports rapid platform validation while maintaining a capital-efficient operational structure.

Revenue generation is expected through upfront licensing payments, co-development funding, development and regulatory milestones, and long-term royalties on commercial sales.

In parallel, GenLumina may collaborate with medical technology companies specializing in endoscopic, surgical, or image-guided light-delivery systems to support integration of SnB-based therapeutics into existing clinical workflows.

The company continues to support early-stage development through non-dilutive funding, innovation programs, and academic collaborations. While the SnB platform is broadly applicable across multiple solid tumor indications, GenLumina's development strategy focuses initially on well-characterized disease settings to systematically de-risk the platform before broader expansion into additional indications and partner-funded programs.



Our current business model canvas.

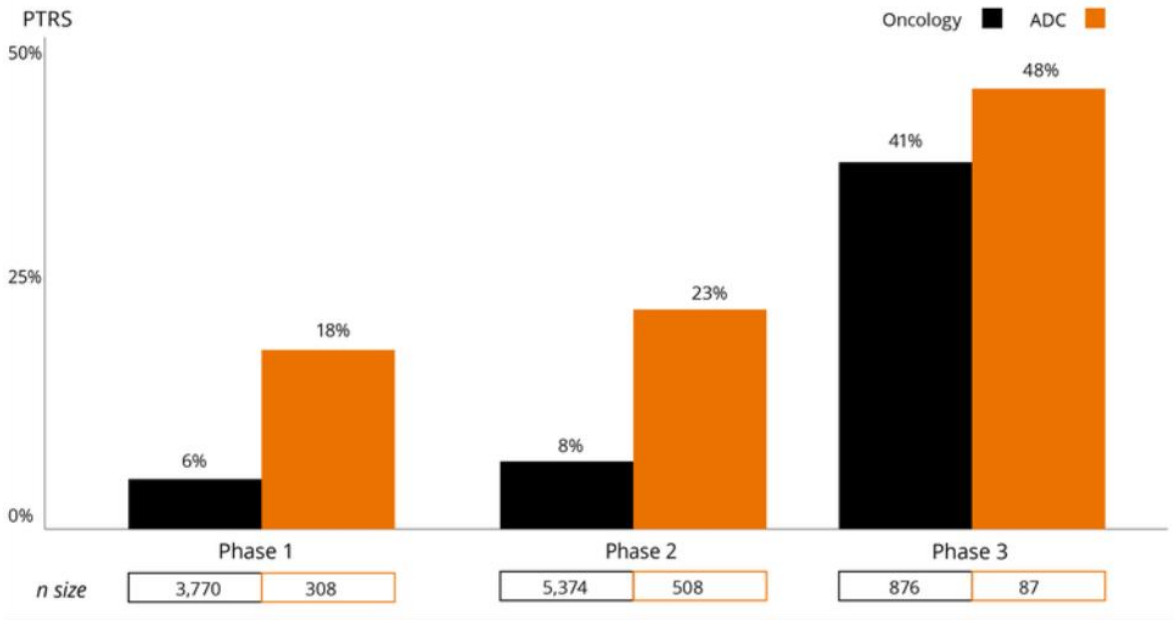
2. Partnering Logic

GenLumina's partnering strategy is built around the staged de-risking of its light-activated ADC/PDC payload platform. Potential partners include ADC-focused biopharma companies seeking differentiated payload technologies, peptide-drug conjugate developers looking to enhance targeting precision, medtech companies active in endoscopy, interventional oncology and image-guided surgery, and pharmaceutical oncology companies with an established colorectal cancer franchise. Partner engagement is expected to become increasingly attractive as GenLumina generates key validation data, including first targeted construct results, in vivo efficacy, safety and biodistribution data, and early CMC feasibility. Depending on the partner profile and stage of development, collaboration structures may include program-level licensing, co-development agreements, option-to-license arrangements, or device-drug collaborations for integration with existing light-delivery and image-guided treatment platforms. This staged approach allows GenLumina to preserve platform value while creating multiple entry points for strategic partners as the technology becomes progressively de-risked.

- Potential Partner Groups:
    - ADC-biopharma companies
    - Peptide-drug conjugate developers
    - Medtech companies in endoscopy/image-guided surgery
    - Pharma oncology companies met CRC franchise
- Partnering moment:
    - After in vivo safety & efficacy
    - After safety/biodistribution
    - After CMC feasibility
    - After first targeted construct data
- Deal type:
    - Program-level license
    - Co-development
    - Option-to-license
    - Device-drug collaboration

3. Platform Strategy

GenLumina's commercial strategy is based on a platform approach, where a single cytotoxic payload, including a DNA-linker, can be conjugated to multiple targeting moieties. This enables rapid expansion across indications and supports faster, and more cost-efficient pipeline development compared to single assets, with a reduction of 40% in overall R&D costs per ZS research. Additionally, the probability of technical and regulatory success (PTRS) is in general, much higher for these classes of compounds compared to standard oncology drugs, which inherently reduces development risks. Having a platform technology as an offering is especially crucial within a challenging investment climate, given the significantly higher risk/reward ratio compared to a single-indication development.



Data from ZS Research indicate that ADCs demonstrate higher probabilities of technical and regulatory success (PTRS) across all clinical phases compared to the broader oncology category. Success rates increase from 18% vs. 6% in Phase 1, 23% vs. 8% in Phase 2, and 48% vs. 41% in Phase 3 (ADC vs. oncology), highlighting the value of precision-based approaches in improving clinical development outcomes. (https://www.zs.com/insights/oncology-antibody-drug-conjugates-revolution)

4. Intellectual Property Position

For investor diligence, the key IP questions are the scope of the exclusive license from Leiden University, field-of-use coverage, sublicensing rights, commercial rights, diligence obligations, royalty economics, termination provisions and change-of-control implications. GenLumina's partnering strategy depends on having sufficient rights to develop, commercialize and sublicense SnB-based therapeutic programs.

The core of GenLumina's intellectual property strategy is to protect its basic platform of light-activated cytotoxic agents based on metal clusters encapsulated within structured molecules. The foundational patent (EP4702141A1), owned by Leiden University with GenLumina owning exclusive license to commercialization, provides broad protection for agents in which a molecule, particularly an oligonucleotide, forms a structure that encloses a metal cluster and releases its activity upon removing the structure around the metal. These claims ensure protection not only for specific compounds but also for an entire class of DNA structures coordinating metal clusters.

The founding team has identified this family of structures to broadly encompass the biocompatible variants of these structures, creating a strong and defensible IP position around platform technology.

The initial patent application was filed in April 2023 to be extended to a PCT application in April 2024. In 2025, the International Preliminary Report on Patentability (WIPO) received and confirmed several claims as novel, inventive, and industrially applicable. A Dutch patent was granted in November 2025, with national phase entry in key markets (US, Europe, Japan, China) planned for 2026.

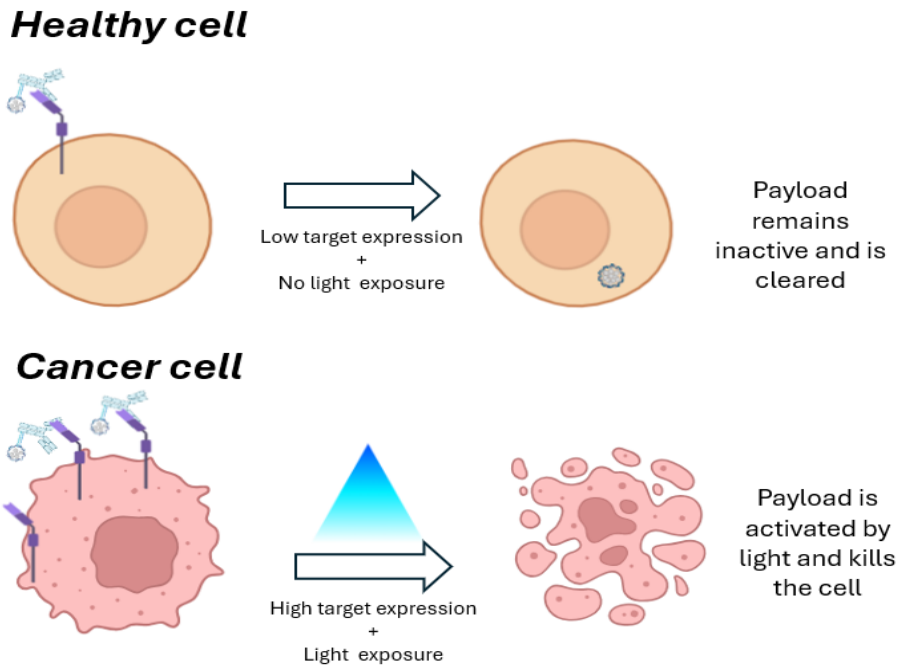
Genlumina's Freedom to Operate is secured through its agreement with Leiden University, which provides rights to sublicense the core IP and grants a broad field of use covering all therapeutic applications. This ensures the company can develop and commercialize its technology without restriction within its target markets.

Opportunities for new IP arise from the combination of the payload with targeting moieties such as antibodies or peptides. This allows the company to generate a family of patents for therapies for particular (groups of) indications if and when it so desires, thereby extending the overall patent lifetime and increasing the long-term value of the IP.

5. Dual Gate Approach

GenLumina's platform is built on a dual-gate activation mechanism designed to maximize tumor specificity while minimizing systemic toxicity. The first gate is biological targeting: the SnB payload is delivered selectively to tumor cells via antibody- or peptide-mediated binding. The second gate is local activation with light: the therapeutic payload remains inactive until exposed to controlled light at the tumor site. Only when both gates are satisfied does the cytotoxic mechanism activate, enabling highly localized tumor cell killing while sparing surrounding healthy tissue. This dual-control approach differentiates GenLumina's technology from conventional ADCs, which release their payload systemically, and from traditional photodynamic therapies that lack molecular targeting precision. Importantly, many promising targeting antigens have not been effectively targeted due to on-target off tumor toxicities that arise when those cancer-overexpressed antigens are also present in healthy tissues. Our technology allows us to address this problem by providing a second gating to the activation of our ADC/PDC

molecule. Even if they accumulate in healthy tissues, they are not exposed to light in those locations, whereas the tumor lesion is illuminated. This approach substantially improves the therapeutic index while reducing systemic toxicity.



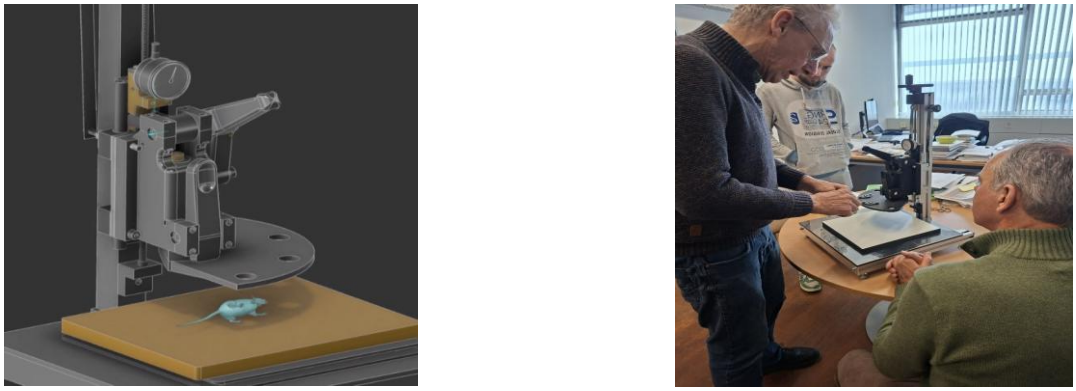
Together, those features create substantial differentiation compared to standard therapies and address significant problems with current and in-development treatments. This is crucial to GenLumina's value proposition and underpinning its platform potential for the treatment of all light-accessible tumors and metastasis.

6. Integration with Medical Technologies

GenLumina’s light-activated therapeutic platform is designed to be compatible with existing medical imaging and light-delivery technologies used in clinical practice. A wide range of clinical devices capable of delivering controlled light to tissue – including endoscopic systems, fiber-optic illumination tools, and surgical imaging platforms can serve as suitable interfaces for activating GenLumina’s SnB-based therapeutics. This compatibility creates opportunities to integrate the company’s drug platform with established medical technologies, potentially accelerating clinical adoption while reducing the need for specialized new hardware.

For its own in vivo validation process, GenLumina is developing a dedicated preclinical

light-delivery solution for test purposes, referred to as a light needle, designed to enable precise activation of SnB in mice and larger animals. This approach supports the evaluation of the platform in in vivo tumor models, generating key data to further de-risk the technology and expand its applicability. Insights gained from these studies are expected to facilitate future integration with clinically available endoscopic and image-guided systems.



Prototype of the in-house developed light-activation needle, designed for the activation of the Silver NanoBullet (SnB) in mouse xenograft models to evaluate proof-of-concept efficacy.

The combination of targeted molecular recognition with device-guided light activation enables a dual-control therapeutic approach, improving spatial precision while minimizing systemic exposure.

GenLumina therefore views collaboration with medical technology companies as a key pathway for future development, particularly in indications where localized or image-guided light delivery is already standard practice.

7. Lead Indication – Colorectal Cancer

Following initial exploration of Basal Cell Carcinoma as an accessible first indication, GenLumina shifted its lead development focus to Colorectal Cancer in 2025, driven by the larger unmet medical need, broader clinical patient population, stronger investment relevance, and a more compelling translational pathway through its collaboration with LUMC and the Health-Holland-supported development program.

Through its collaboration with Leiden University Medical Center (LUMC), GenLumina has access to a proprietary EpCAM-targeting peptide, enabling the development of a

targeted therapeutic approach in CRC.

EpCAM (epithelial cell adhesion molecule) is a well-established tumor-associated antigen that is highly expressed across a wide range of epithelial cancers, including CRC. It plays a role in cell adhesion, proliferation, and tumor progression, making it an attractive target for therapeutic intervention. However, EpCAM is also expressed at lower levels in healthy epithelial tissues, which has historically limited its clinical utility. Previous systemic approaches targeting EpCAM have encountered safety challenges, particularly due to off-target toxicity.

As a result, EpCAM is widely regarded as a “biologically validated but systemically constrained” target. Despite this, renewed interest has emerged through the development of strategies that enable conditional or localized activation, thereby reducing systemic exposure. Recent clinical efforts by other companies have demonstrated promising early results using such approaches, further supporting the clinical relevance of EpCAM in CRC.

GenLumina’s platform is designed to address these historical limitations. By combining a next-generation EpCAM-targeting peptide developed at LUMC with its proprietary light-activated payload, GenLumina enables spatially controlled activation of the therapeutic only at the tumor site. This dual-targeting strategy, molecular recognition combined with localized light activation, has the potential to unlock the full therapeutic value of EpCAM while minimizing off-target effects.Since the production process is usually much simpler and less expensive, using peptides for targeting offers further benefits in creating a consistent and reasonably priced final product.

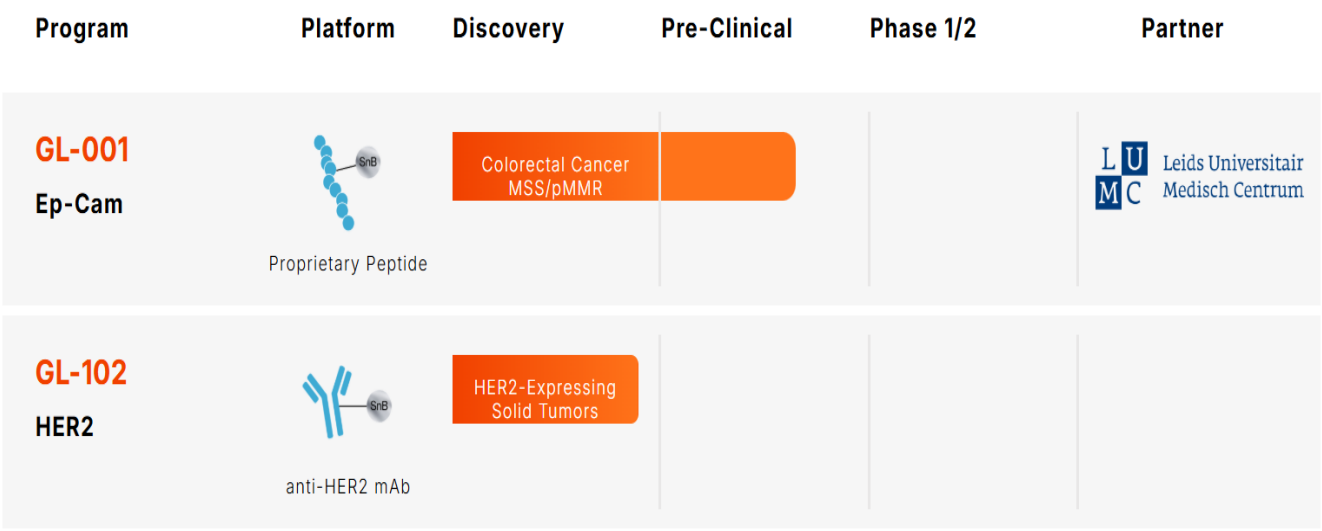
This approach positions EpCAM as a highly relevant entry target for GenLumina’s platform in CRC, with the potential to improve treatment precision, enhance local tumor control, and reduce systemic toxicity.

8. Current Pre-clinical Pipeline

GenLumina’s current pipeline consists of preclinical programs built on the SnB light-activated payload platform. All programs are at the discovery or early preclinical stage and are designed to validate the platform across multiple targeting modalities and solid

tumor indications.

The pipeline includes both partnered and proprietary research programs, reflecting GenLumina's dual strategy of platform validation and long-term value creation through internal programs.



Currently, a total of two distinct programs are underway:

GL-001 – EpCAM (Partnered with LUMC)

GL-001 is GenLumina's lead partnered program targeting EpCAM in colorectal cancer, with a focus on hard-to-treat MSS/pMMR subtypes where immunotherapy usually fails. The program leverages a proprietary peptide developed at the Image Guided Surgery group of the LUMC Hospital to guide the Silver Nano-Bullet (SnB) toward tumor tissue. Light activation enables highly localized cytotoxicity with the goal of improving local tumor control while minimizing systemic toxicity, overcoming previous EpCAM targeting barriers. Current activities are focused on in vitro and in vivo proof-of-concept studies to validate tumor selectivity, pharmacodynamic and pharmacokinetics, light activation, and safety. The collaboration represents a € 700k project funded by Health-Holland through a fully non-dilutive subsidy.

GL-102 – HER2 (Proprietary Program)

GL-102 is GenLumina's proprietary program targeting HER2-expressing solid tumors

using clinically validated anti-HER2 monoclonal antibodies conjugated to the SnB. Ongoing in vitro work supports robust conjugation and targeting potential in HER2-positive cancers such as breast tumors. This program highlights the applicability of the SnB platform to established oncology targets and will act as a proof-of-concept for both built-in linker technology and the functionality of the SnB platform as a universal ADC payload.

9. Key Opinion Leaders

To complement its scientific development, GenLumina actively engages with clinical experts in oncology and interventional medicine to assess the potential applicability of its light-activated therapeutic platform. During 2024 and 2025, GenLumina technology received positive feedback from key opinion leaders operating in multiple therapeutic areas, particularly in the treatment of solid tumors.

"Given the potential of GenLumina's light-activated therapy to target tumors effectively, improve surgical precision, and minimize collateral tissue damage, I believe this technology holds great promise for advancing cancer treatment, particularly for colorectal, ovarian, and pancreatic cancers."

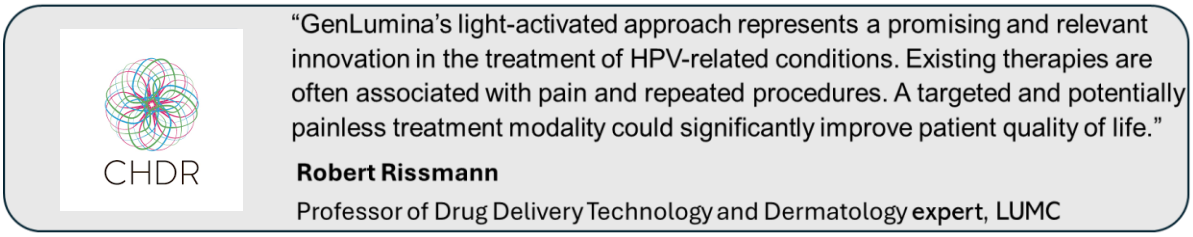
Alexander Vahrmeijer
Professor of Molecular Guided Precision Surgery, LUMC

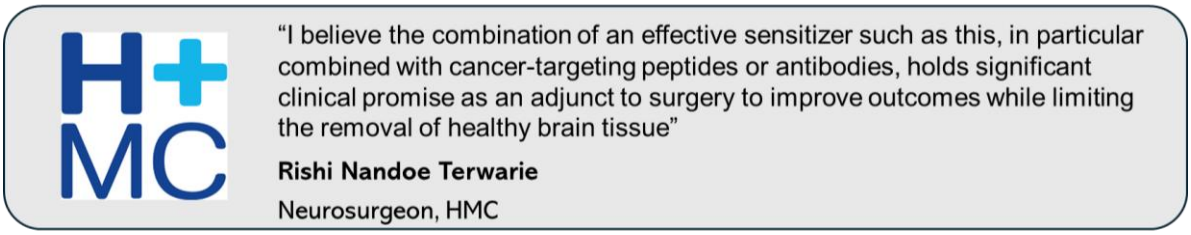
"A better, more tumor-selective and less toxic treatment for skin cancers is eagerly awaited. The light-activated DNA-silver constructs provide a new opportunity to explore highly selective treatment of superficial cancers."

Wouter Vogel
Nuclear Oncologist, NKI

"A more effective photodynamic treatment would make tens of thousands of surgical procedures with complications, disturbing scars and multiple visits to the hospital unnecessary every year."

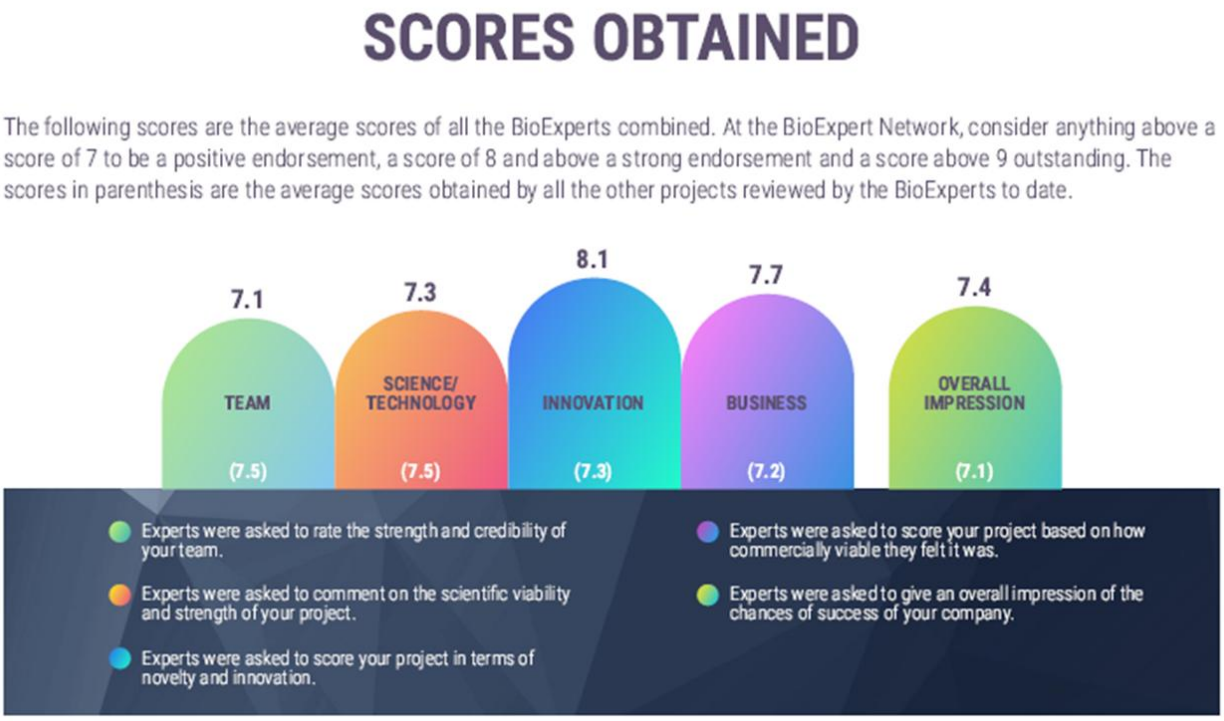
Remco van Doorn
Dermatologist, LUMC





External BioExpert Review

In 2025, GenLumina's proposition was reviewed by 14 independent BioExperts through the Capital Cell BioExpert Network. The review provided an external assessment of the company's team, science and technology, innovation, business potential and overall impression. The scores indicate a positive endorsement of GenLumina's proposition, with particularly strong recognition of the platform's innovation potential. This external expert assessment supported GenLumina's admission to the Capital Cell crowdfunding platform and provides an additional validation point as the company prepares financing options for the preclinical development phase.



10. Colorectal Cancer Market Opportunity

Colorectal cancer (CRC) represents a significant unmet medical need and a compelling indication for GenLumina's light-activated therapeutic platform. In 2022, CRC accounted for approximately 1,9 million new cases and more than 900.000 deaths worldwide, making it the third most commonly diagnosed cancer and the second leading cause of cancer-related mortality globally (https://www.who.int/news-room/fact-sheets/detail/colorectal-cancer).

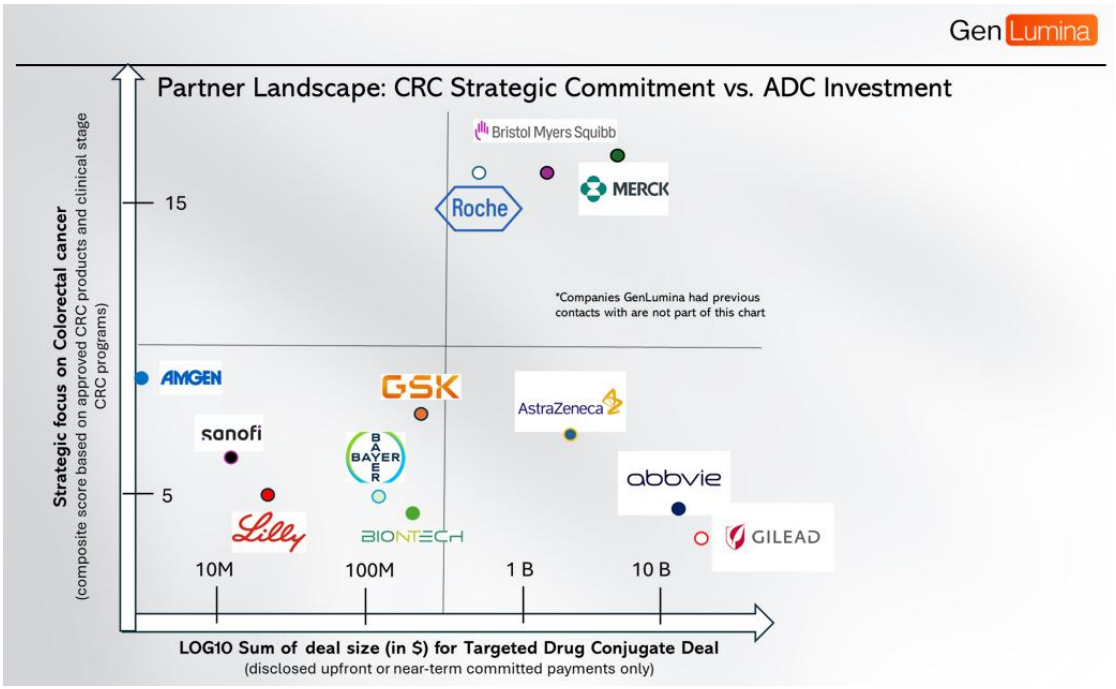
Despite advances in surgery, systemic therapy, targeted therapy and immunotherapy, recurrence remains a clinically relevant challenge after curative-intent treatment, particularly in patients with stage I–III disease and high-risk pathological features. Recurrence patterns are influenced by tumor stage, location, margin status and other risk factors, underlining the need for improved local control strategies in selected patient populations.

From a commercial perspective, CRC also represents a substantial oncology market. Published market analyses estimate the global colorectal cancer therapeutics market at approximately USD 12,4 billion in 2023, with projected growth toward approximately

USD 18,6 billion by 2032 (https://www.gminsights.com/industry-analysis/colorectal-cancer-therapeutics-market). These estimates vary by methodology and market definition but consistently indicate a sizeable and growing therapeutic area.

GenLumina's platform is well suited to CRC because many colorectal tumors and local disease sites are accessible through established clinical workflows, including endoscopic, intraoperative and image-guided approaches. This creates a potential opportunity for localized activation of the therapeutic payload directly at or near the tumor site.

The SnB platform is positioned as a complementary local therapy aimed at improving treatment precision by targeting residual microscopic disease, tumor margins or localized recurrence settings where controlled light delivery is feasible. In parallel, the platform's modular architecture enables conjugation to tumor-targeting moieties such as peptides or antibodies, supporting potential expansion into additional solid tumor indications where local activation can be clinically integrated.



Partner Landscape Colorectal Cancer versus ADC Investment.

Scientific Overview

01. Our R&D Roadmap

02. Spatially activated ADCs

03. Overcoming Light-activated Therapies Limitations

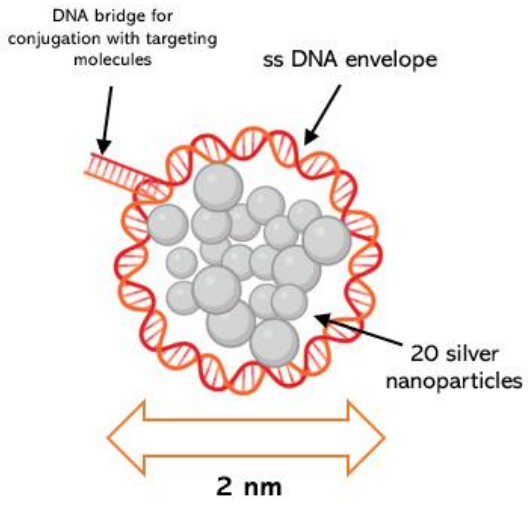
04. Overcoming Resistance in ADCs/PDCs

05. Self-assembly Behavior & Linker Technology

06. In-vivo Distribution

Scientific Overview

GenLumina is developing a platform technology based on DNA-encapsulated silver nanoclusters, referred to as Silver Nanobullets (SnB), which can be precisely activated by light at defined wavelengths. The technology supports activation with low-intensity visible light at approximately 405 nm and is being further developed for two-photon activation to enable deeper tissue penetration and enhanced spatial precision. The SnB payload can be conjugated, via GenLumina's linker technology, to targeting ligands such as peptides or antibodies, enabling tumor-cell specificity while sparing healthy tissue.



Schematic representation of SnB, GenLumina's main asset.

The core innovation is the controllability of the therapeutic mechanism: the payload remains inert until activated by light at the tumor site. Light activation opens the DNA package, inducing a localized silver-mediated cytotoxic effect. This spatially controlled activation is designed to reduce systemic exposure and improve safety. As the light-induced silver toxicity mechanism is tumor-agnostic, the SnB payload may be broadly applicable across diverse solid tumor types.

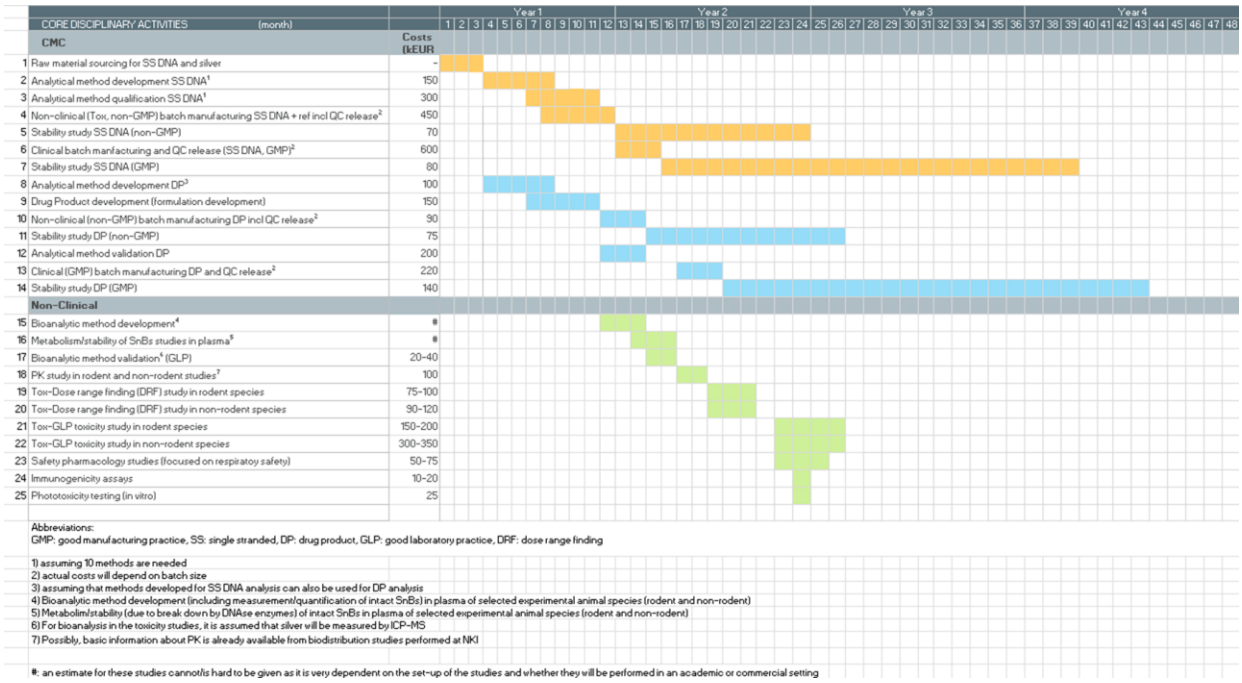
1. Our R&D Roadmap

During 2025, GenLumina progressed from early-stage laboratory research toward a structured preclinical development program, including the establishment of key analytical methods and initial characterization of its SnB platform.

Genlumina hired a consultancy firm which defined a comprehensive development roadmap covering both Chemistry, Manufacturing and Controls (CMC) and preclinical evaluation. This 'Drug Development Plan' was half-funded by a Health-Holland Innovation Broker subsidy. On the CMC side, efforts focus on the scalable production and characterization of the drug substance (silver-DNA nanocluster) and its formulation into a stable drug product suitable for in vivo studies and future clinical use. This includes the development of analytical methods, stability assessment, and preparation for GLP-compliant manufacturing.

In parallel, GenLumina is advancing its preclinical program, including pharmacokinetics (PK), biodistribution, and early safety studies. These activities are designed to establish proof of mechanism, optimize dosing parameters, and generate the data required for regulatory engagement.

As development progresses, the scope and complexity of activities are expected to increase, particularly with the transition toward GLP-compliant toxicology studies, and eventual GMP manufacturing. To this end, the company has several suitable production partners lined up and will formalize the manufacturing plans in 2026. These steps represent critical milestones toward first-in-human clinical trials.



	CORE DISCIPLINARY ACTIVITIES (month)	Costs (kEUR)
	CMC	
1	Raw material sourcing for SS DNA and silver	-
2	Analytical method development SS DNA[1]	150
3	Analytical method qualification SS DNA[1]	300
4	Non-clinical (Tox, non-GMP) batch manufacturing SS DNA + ref incl QC release[2]	450
5	Stability study SS DNA (non-GMP)	70
6	Clinical batch manfacturing and QC release (SS DNA, GMP)[2]	600
7	Stability study SS DNA (GMP)	80
8	Analytical method development DP[3]	100
9	Drug Product development (formulation development)	150
10	Non-clinical (non-GMP) batch manufacturing DP incl QC release[2]	90
11	Stability study DP (non-GMP)	75
12	Analytical method validation DP	200
13	Clinical (GMP) batch manufacturing DP and QC release[2]	220
14	Stability study DP (GMP)	140
	Non-Clinical	
15	Bioanalytic method development[4]	#
16	Metabolism/stability of SnBs studies in plasma[5]	#
17	Bioanalytic method validation[4] (GLP)	20-40
18	PK study in rodent and non-rodent studies[7]	100
19	Tox-Dose range finding (DRF) study in rodent species	75-100
20	Tox-Dose range finding (DRF) study in non-rodent species	90-120
21	Tox-GLP toxicity study in rodent species	150-200
22	Tox-GLP toxicity study in non-rodent species	300-350
23	Safety pharmacology studies (focused on respiratoy safety)	50-75
24	Immunogenicity assays	10-20
25	Phototoxicity testing (in vitro)	25

Abbreviations:
GMP: good manufacturing practice, SS: single stranded, DP: drug product, GLP: good laboratory practice, DRF: dose range finding

1) assuming 10 methods are needed
2) actual costs will depend on batch size
3) assuming that methods developed for SS DNA analysis can also be used for DP analysis
4) Bioanalytic method development (including measurement/quantification of intact SnBs) in plasma of selected experimental animal species (rodent and non-rodent)
5) Metabolim/stability (due to break down by DNAse enzymes) of intact SnBs in plasma of selected experimental animal species (rodent and non-rodent)
6) For bioanalysis in the toxicity studies, it is assumed that silver will be measured by ICP-MS
7) Possibly, basic information about PK is already available from biodistribution studies performed at NKI

#: an estimate for these studies cannot/is hard to be given as it is very dependent on the set-up of the studies and whether they will be performed in an academic or commercial setting

2. Spatially Activated ADCs

Unlike traditional ADCs, which deliver potent cytotoxic payloads systemically and may cause off-target toxicity, GenLumina's SnB technology is designed to enable spatially controlled payload activation. The payload remains inert until it is exposed to light of a specific wavelength at the tumor site. Light activation opens the ssDNA package, inducing a rapid interaction with silvercluster in the cell nucleus. This disrupts the ability of the targeted tumor cells to replicate, ultimately leading to their clearance by the body as dead cells.

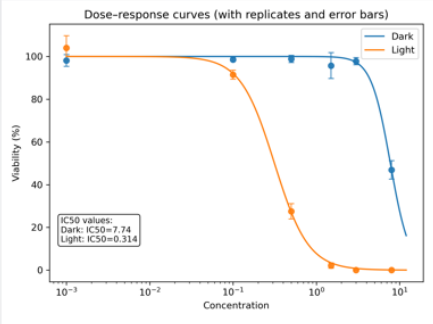
The platform uses antibody/peptide-guided delivery to selectively accumulate those ultra-small silver clusters inside tumor cells. The stabilizing DNA-based shell that surrounds the cluster contains proprietary DNA linker that act as an attachment point between the targeting moiety and the payload. Upon controlled illumination, the SnB complex produces a highly localized therapeutic effect, enabling photodynamic therapy-like precision (PDT) with ADC-level targeting, while avoiding the systemic toxicity associated with conventional ADCs. Because SnB does not rely on generating reactive oxygen species (ROS), it is, unlike conventional PDT, completely oxygen independent, which is essential inside the highly hypoxic environment of solid tumors.

3. Overcoming Light-activated Therapies Limitation

GenLumina's approach represents a fundamentally different activation paradigm. Typically, existing PDT suffers from limited efficacy due to a complex biological effect, and a dependence on oxygen inhibiting efficacy in hypoxic tumor regions. GenLumina's SnB interacts with the DNA in the nucleus, and functions independently of oxygen, potentially enabling activity in hypoxic tumor environments where conventional PDT is limited. While clinical efficacy remains to be demonstrated, early preclinical findings support further investigation of the platform's therapeutic potential**.** In the table below we benchmark our treatment against clinically approved photodynamic therapies, including Foscan (temoporfin) , a second-generation photosensitizer used in the palliative management of advanced head and neck squamous cell carcinoma, and Photofrin (porfimer sodium), a first-generation photosensitizer approved for the treatment of microinvasive endobronchial non-small cell lung cancer (NSCLC) and for palliation of esophageal and obstructing endobronchial NSCLC.

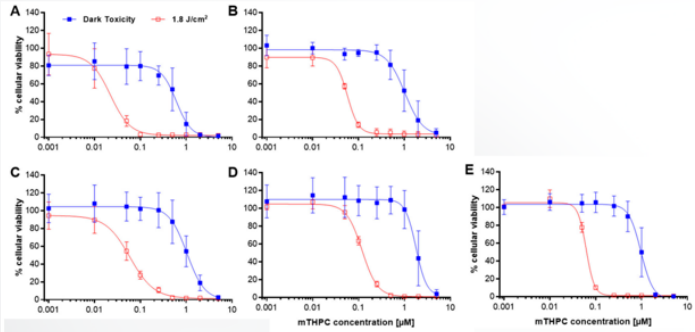
	Classical PDT (Photofrin/Foscan)	GenLumina SnB
Payload type	Organic Photosensitizer	Ultra-small Ag nanocluster embedded in DNA ss strand
MoA	Generation of reactive oxygen species (ROS)	Multisite Ag-target cell DNA interactions
Targeting	Non-targeted (passive accumulation)	Targeted through ADC/PDC constructs
Resistance	Susceptible to hypoxia and increased tumor antioxidant defences	Non-enzymatic action makes resistance difficult to arise. Not susceptible to hypoxia
Photosensitivity risk	Significant and long-lasting	Minimal due to rapid clearance
Clinical workflow	Standalone PDT procedure	Integrated into an image-guided workflow
Clinical positioning	Local palliation for superficial tumors	Precision local tumor control, complementary to systemic therapies

GenLumina SnB



Cell Line	IC50 Dark (μM)	IC50 Light (μM)	PI (Dark/Light)
HT-29	**7.74**	**0.314**	**24.6**

Foscan (Clinically approved PDT)



Cell line	IC50 Dark (μM)	IC50 Light (μM)	PI (Dark/Light)
A-427	0.60	0.02	30.0
BHY	1.00	0.06	16.7
KYSE-70	1.00	0.06	16.7
RT-4	1.80	0.10	18.0
SISO	1.00	0.06	16.7
Mean ± SD	—	—	**19.6 ± 5.9**

Dose-response curves SnB versus Foscan.

4. Overcoming Resistance in ADCs/PDCs

Resistance is one of the central limitations of conventional chemotherapeutic payloads. Tumors frequently develop biochemical escape mechanisms, such as drug efflux, metabolic rewiring, or enhanced DNA repair, that allow them to survive treatment. Because the mechanism does not depend on a single biochemical pathway, it may reduce the likelihood of classical resistance mechanisms such as efflux-mediated resistance or pathway-specific escape. This remains to be validated across relevant tumor models. Upon light activation, the ultra-small nanodrug acts as a ‘glue’ that physically engages multiple sites along the DNA, creating a structural blockade rather than relying on a single biochemical target or pathway. This mechanism may reduce the likelihood of conventional resistance pathways compared to classical chemotherapeutic approaches. As a result, the likelihood of resistance emerging is inherently and significantly reduced compared to classical chemotherapy approaches. This approach makes our therapy potentially suitable for chemo-radiation resistant lesions.

5. Self-assembly Behavior & Linker Technology

A key advantage of the SnB platform is that silver nanoclusters self-assemble around

DNA scaffolds. The synthesis of the payloads is therefore cost-effective in materials, time and equipment. The DNA-based linker is compatible with all chemical conjugation methods, giving flexibility in choice of targeting moiety and method. This simplicity is of particular importance in the ADC market, where the incorporation of expensive antibodies can quickly make new treatments too costly to be viable. The simplicity of the payload synthesis and conjugation method supports scalability for future development.

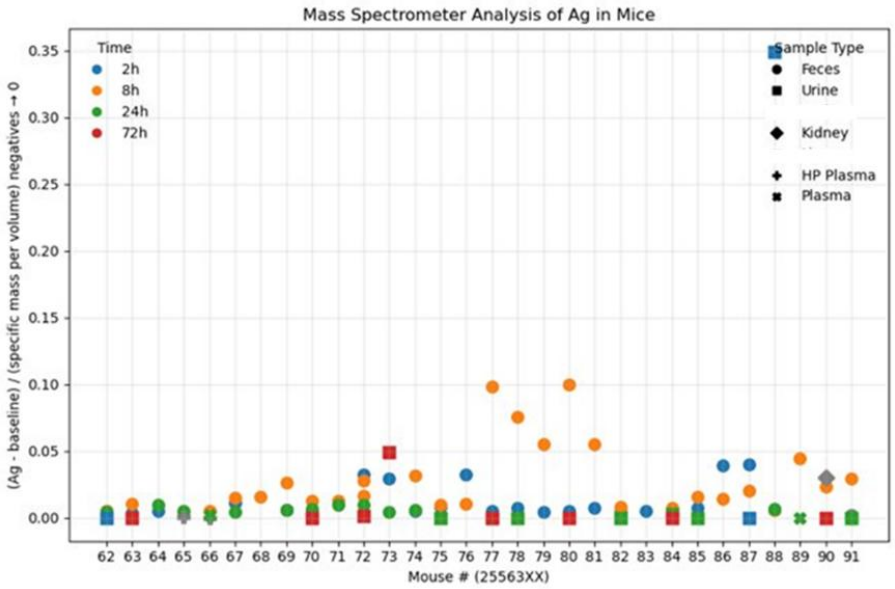
6. In-vivo Distribution

Mass spectrometry analysis of silver (Ag) levels in healthy mice at 2, 8, 24, and 72 hours post-administration demonstrated systemic distribution, with detectable levels in plasma, kidneys, urine, and feces.

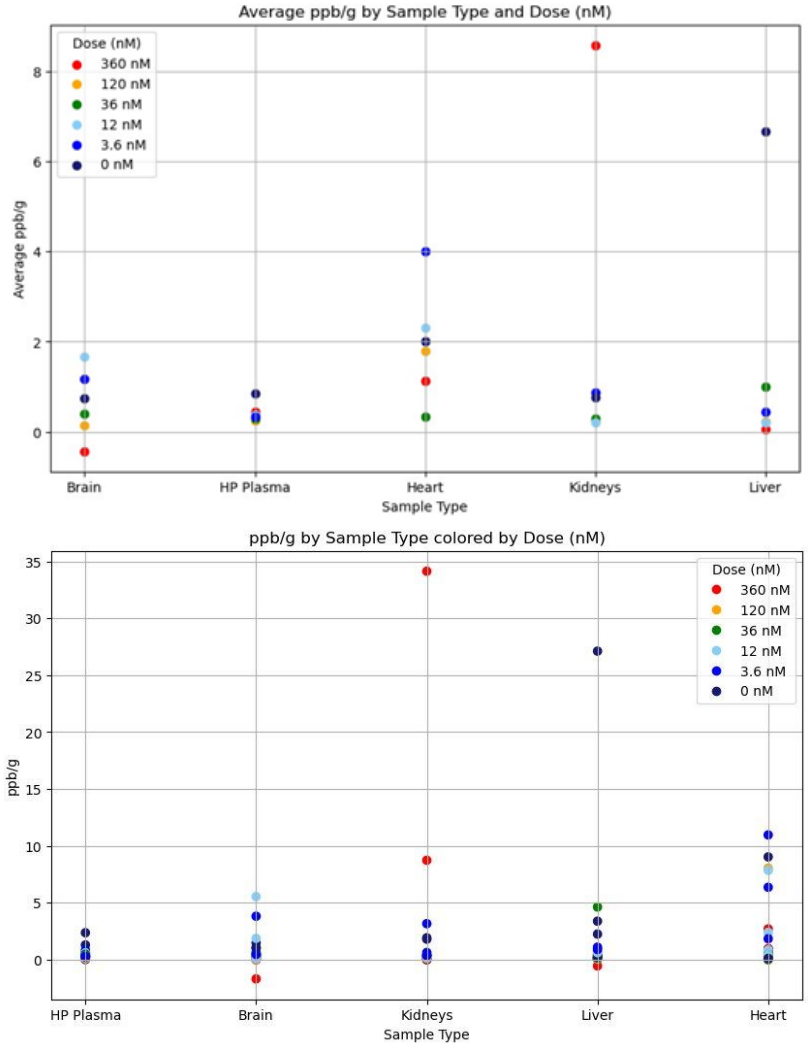
Across most organs, silver concentrations remained close to baseline over time, indicating limited tissue accumulation. At higher doses, increased levels were primarily observed in the kidneys and liver, consistent with their roles in clearance and metabolic processing. Importantly, no sustained accumulation was detected in any organ, and exposure in the brain remained minimal.

Overall, these results suggest that SnB exhibits a favorable biodistribution profile, characterized by systemic exposure, efficient clearance, and limited long-term tissue retention.

These studies were conducted in healthy mice using a non-targeted construct. The incorporation of tumor-targeting moieties is expected to enhance tumor-specific accumulation and further reduce off-target exposure. Additional studies in tumor-bearing models are planned to validate this approach.



Mass spectromety analysis of results of silver (Ag) levels in healthy mice subgroup across multiple biological samples (èlasma, organs, urine and feces) at 2, 8, 24, and 72 hours after administration, showing biodistribution and clearance of the Silver Nanobullet platform.



Figures showing mass spectrometry results for the distribution of silver (Ag) across multiple tissues (plasma, brain, kidneys, liver, and heart) following exposure to increasing concentrations of the Silver NanoBullet (SnB) in two healthy mice subgroups.

Operational Highlights (2024-2025)

1. Foundation year 2024
2. Q1 – 2025
3. Q2 – 2025
4. Q3 – 2025
5. Q4 – 2025

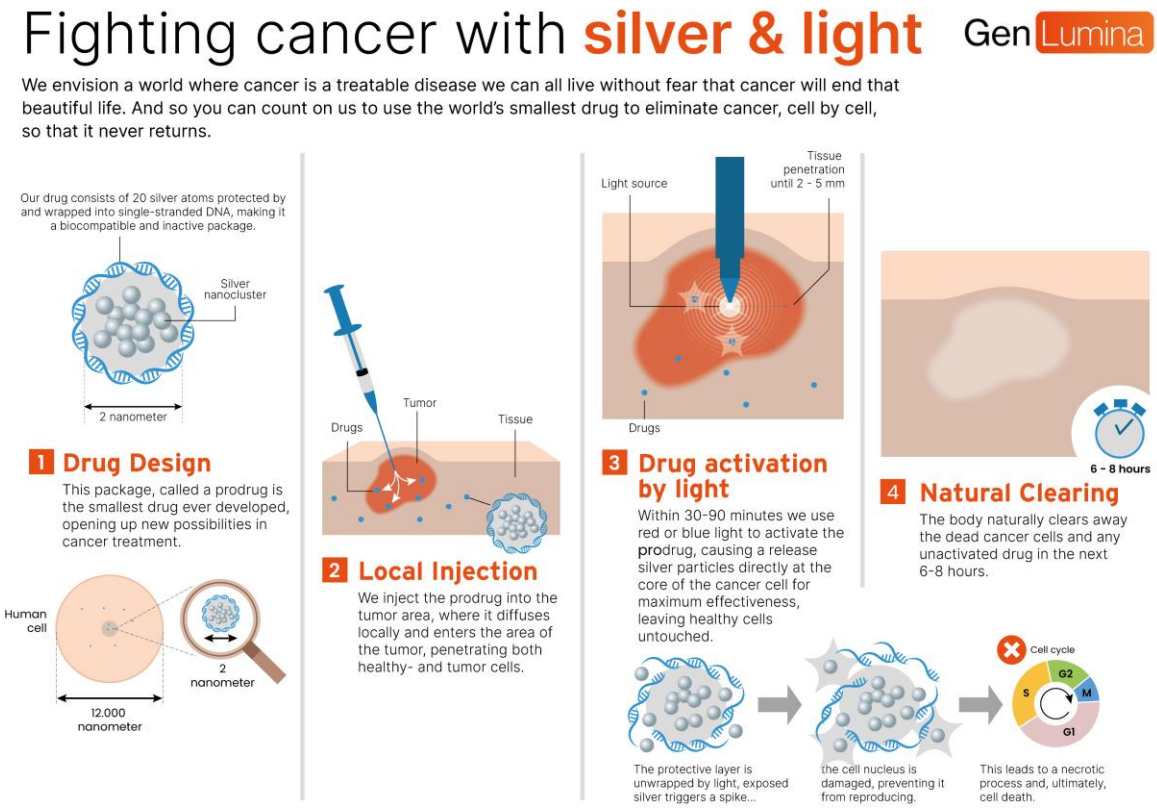
Operational Highlights

Foundation year 2024

In early 2024, GenLumina laid its organizational and scientific groundwork within the Leiden BioScience Park ecosystem. The team defined its legal structure, governance model, and intellectual property framework in close collaboration with LURIS, the Technology Transfer Office of Leiden University. Participation in the Venture Academy programme offered by the Center for Innovation and Entrepreneurship at PLNT in Leiden provided critical support during this transition. During this phase, the company refined its business and funding strategy and engaged in public innovation programs to secure its initial runway.

The official incorporation took place on August 13, 2024, marking the start of a new phase focused on brand visibility, stakeholder engagement, and validation of the company's scientific proposition. Right after incorporation, GenLumina secured the Enterprise Leiden Fund (ELF) amounting to €35.000, which allowed for the start of operations.

A first communication campaign introduced GenLumina's unique combination of light and silver compounds for selective tumor cell elimination. In the final quarter of 2024, the company explored with researchers in oncology, radiology, and dermatology, participated in accelerator programs, and strengthened its presence in the European life sciences ecosystem, laying the groundwork for its first preclinical studies.



First infographic to explain our drug.

Q1 2025 – Structuring & Funds

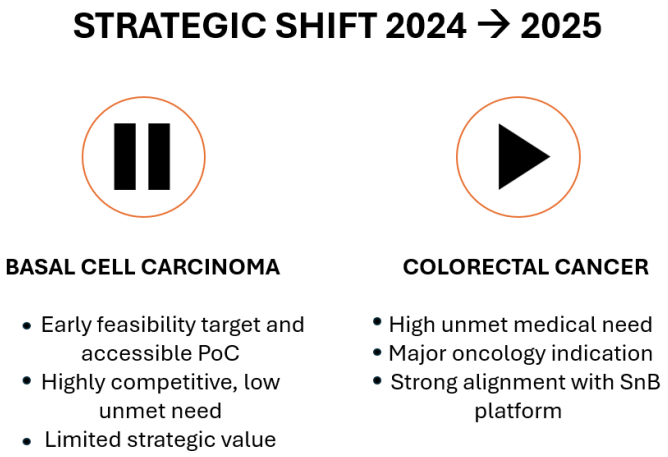
The first quarter of 2025 focused on finalizing funding contracts, the licensing agreements for its core technology, and collaboration frameworks. GenLumina increased its international visibility by attending BIO-Europe Milan and initiating contacts with potential institutional partners. During this period, GenLumina successfully secured a favorable convertible loan through UNIIQ, the pre-seed investment fund of the Dutch province of South-Holland. The first tranche of this convertible financing provided crucial early capital to start GenLumina's preclinical R&D track.

At this stage, the lead indication under development was Basal Cell Carcinoma (BCC), chosen for its early feasibility and translational potential.

Q2 2025 – Strategic Pivot to CRC & Scientific Expansion

GenLumina achieved official registration with the European Medicines Agency (EMA) as a recognized Small and Medium-Sized Enterprise (SME) an important milestone to facilitate future regulatory interactions and the transition from preclinical to clinical phases.

Following extensive consultations with academic and clinical partners, GenLumina shifted its lead indication to Colorectal Cancer (CRC), recognizing a higher unmet medical need, improved translational prospects, and strong alignment with collaborations at Leiden University Medical Center (LUMC).



Participation in the UNLOCK_ Incubator Program accelerated the company's operational growth and supported the expansion of laboratory activities, including biodistribution, in vitro efficacy, and in vivo safety studies. These efforts were supported by external partners specializing in targeting, imaging, and formulation optimization.

During this period, GenLumina finalized the license agreement for the SnB technology. This included a formalized Shareholders' Agreement with Libertatis Ergo Holding (LEH), representing Leiden University as a 15% equity partner. In addition to access to the core IP, this collaboration strengthened the company's scientific credibility and ensured long-term access to Leiden's academic ecosystem.

In parallel, negotiations began with angel investors to establish the company's first valuation. This valuation underpins a forthcoming Capital Cell crowdfunding campaign,

approved by the platform's international bio-expert panel. The campaign will enable early private investment that can be matched with public funding instruments, creating a blended finance model capable of funding the preclinical trajectory through IND/CTA submission.

At the same time, targeting partners were approached to explore the integration of GenLumina's light-activated payload with existing targeting platforms. These co-development and licensing collaborations form the foundation of GenLumina's B2B business strategy.

Q3 2025 – Execution & B2B Positioning & Scaling

GenLumina transitioned to full operational capacity. The Health-Holland innovation grant formally commenced, supporting preclinical development of light-activated nanotherapeutics at the company and the Leiden University Medical Center. Participation in the IBE Program further expanded GenLumina's connections within the Boston BioScience Network and potential connections with U.S. investors.

A detailed R&D roadmap was developed by external consultancy firm, defining analytical method development, CMC preparation, and non-clinical testing toward IND/CTA submission. This roadmap was funded by a Health-Holland Innovation Broker subsidy.

From July 1, 2025, the company employed its first full-time laboratory technician, expanding to a second full-time laboratory technician by November 2025 as laboratory activity intensified at LUMC and in the in-house lab. On September 15, 2025, additional

analytical expertise was onboarded to strengthen biodistribution and systemic analysis.

Internally, GenLumina implemented a governance and project-management system, including time and project registration for all three co-founders, each contributing to scientific and organizational growth. This enables transparent tracking of personnel contributions across R&D and operational activities and supports compliance with funding and reporting requirements.

Key research partners were recognized, including LUMC and NKI. Our laboratory has a portfolio of suppliers at excellent rates through participation in the Holland Bio network.

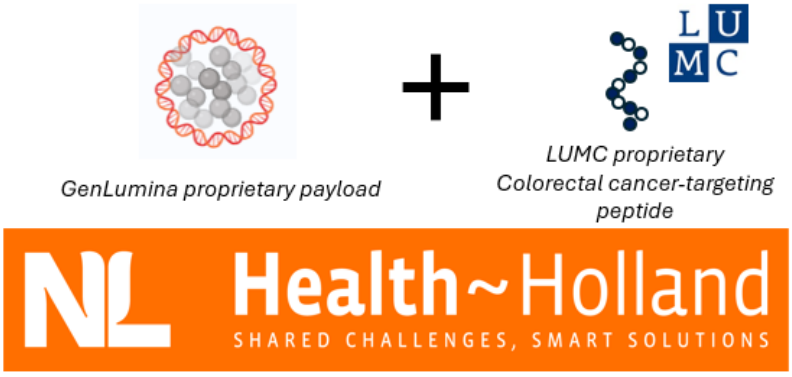
GenLumina also receives advisory input from a multidisciplinary advisors covering pre-clinical research, bioscience networking, and financial governance.

GenLumina's B2B repositioning defines its technology as a light-activated ADC/PDC platform suitable for integration into existing antibody or peptide-based therapies. This shift opened new partnership opportunities with biotech and pharmaceutical companies developing targeted oncology solutions.

In addition, Key Opinion Leaders (KOL) in image-guided surgery, radiology, neurosurgery, and dermatology provide strategic and translational guidance for future development stages.

Q4 2025 – Professionalization & GLP Preparation & Investment Readiness

The final quarter was characterized by operational expansion and the initiation of the Health-Holland–LUMC consortium project, combining expertise in chemistry, imaging, and biological testing. As part of the project, the company received €172.500 as first milestone through Health-Holland, with upcoming milestones totaling €430.000. These funds facilitate ongoing research at the company and one full-time staff at the LUMC.



In November, the Dutch patent was granted with pending applications for EU, US, Japan and China expected for 2026.

The company's laboratory became fully operational, equipped for light activation, conjugation testing, and analytical validation. In parallel, Good Laboratory Practice (GLP) processes were initiated for drug-material production and experimental validation, ensuring readiness for regulatory-grade data.

Investor engagement progressed with structured outreach to angel and strategic investors and preparation for the Series A fundraising round planned for the following years.

GenLumina repositioned from a chemical payload provider toward a program-level ADC/PDC platform company, developing integrated proof-of-concept constructs with partners and selected proprietary programs.

Alternative funding sources, including crowdfunding and private investment, were explored to extend cash runway and broaden early stakeholder engagement. The company also initiated more structured investor and stakeholder communications to support future fundraising and strategic partnering.

Financial Overview

1. Investment Thesis
2. Funding & Capital Structure
3. Operational Cost Allocation 2025
4. Cash Runway
5. Financial Position
6. Financing Needs & Use of Funds

Financial Overview

1. Investment thesis

GenLumina is developing a differentiated platform designed to improve the therapeutic index of targeted oncology therapies (ADC/PDC) by replacing the “D”- drug/payload – in existing PDC/ADC combining targeting with local light activation of our SnB-payload. This dual-gate approach may enable tumor-localized cytotoxicity while reducing systemic exposure and on-target/off-tumor toxicity.

The platform is modular: the SnB payload can potentially be paired with multiple antibodies or peptides across solid tumor indications where light delivery is clinically feasible. This creates opportunities for program-level licensing, payload-platform partnerships and medtech-enabled procedural oncology collaborations.

The company is pursuing a capital-efficient validation strategy by combining non-dilutive funding, academic collaborations and a lean operating model. The key value inflection for 2026 is the generation of targeted in vivo data, early safety/biodistribution evidence, and CMC readiness sufficient to support strategic partnering and a larger financing round.

2. Funding & Capital Structure

In 2024, shortly after incorporation, GenLumina received a loan from the Enterprise Leiden Fund (ELF) amounting to €35.000, with a non-compounding annual interest rate of 8%. Following this, the company secured multiple sources of external funding.

The secured external funding and grants provide a solid financial foundation for GenLumina’s preclinical development program. The combined dilutive and non-dilutive capital from UNIIQ, Health-Holland, and MIT Haalbaarheid enable the company to advance its platform toward GLP validation and future Series A readiness while maintaining a lean operational structure.

UNIIQ Convertible Loan	Health~Holland Grant (with LUMC)	MIT Haalbaarheidssubsidie	Biotech booster
350,000€	430,000€	20,000€	200,000€
Early-stage financing to support preclinical development milestones	Collaborative R&D project for preclinical development and proof-of-concept studies	Early feasibility assessment and roadmap development	Collaboration with Leiden University's Faculty of Science for research on light-activated drugs
Tranche 1 – July 2025 Tranche 2 – October 2025 Tranche 3 – Expected Q2 2026 (after preclinical validation)	40% (€172,500) received in 2025 40% (€172,500) expected Q3 2026 20% (€85,000) expected Q3 2027	Granted Q2 2025	Q3 2024 – Q3 2026

In July 2025, GenLumina secured a €350.000 convertible loan from UNIIQ to support its preclinical development activities. The loan is disbursed in milestone-based tranches and represents the company's primary long-term financing obligation.. Upon a qualified financing round, the instrument will convert into equity according to the agreed conversion terms.

In addition to this financing, the company benefits from non-dilutive grant funding, including the €430.000 Health-Holland R&D project grant and the €20.000 MIT Haalbaarheidssubsidie. These grants support the execution of research and development activities while preserving the company's equity structure, as they do not affect share capital or ownership.

In total, €835.000 in external funding has been awarded directly to GenLumina through a combination of convertible financing and non-dilutive grants.

Beyond these direct contributions, GenLumina also benefits indirectly from a €200.000 Biotech Booster grant awarded to Leiden University, which supports fundamental research on light-activated molecules. This research contributes to the broader scientific foundation of GenLumina's technology platform and indirectly supports the company's preclinical development efforts.

Internal Contributions

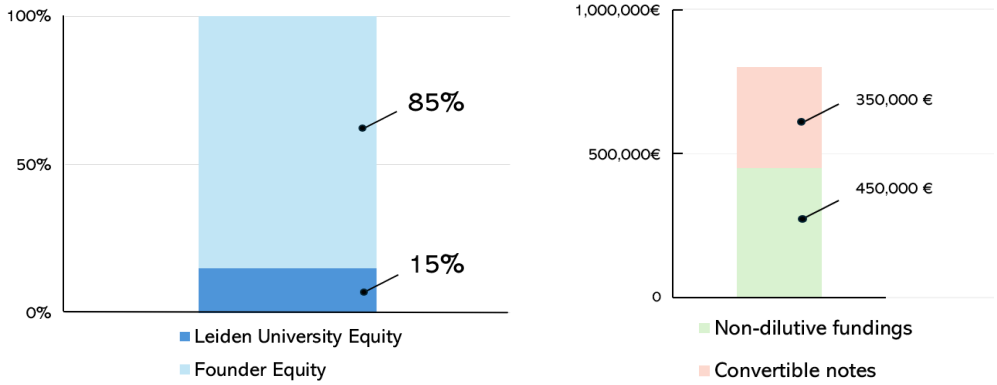
During 2024 and 2025, GenLumina's founders contributed substantial operational,

scientific, and strategic effort while operating under below-market compensation arrangements. Formal tracking of founder time allocation began in January 2025, followed by a structured compensation framework in July 2025. These internal contributions allowed the company to maintain a lean operating structure and allocate available capital primarily toward research and development activities during its early operational phase.

Capital Structure

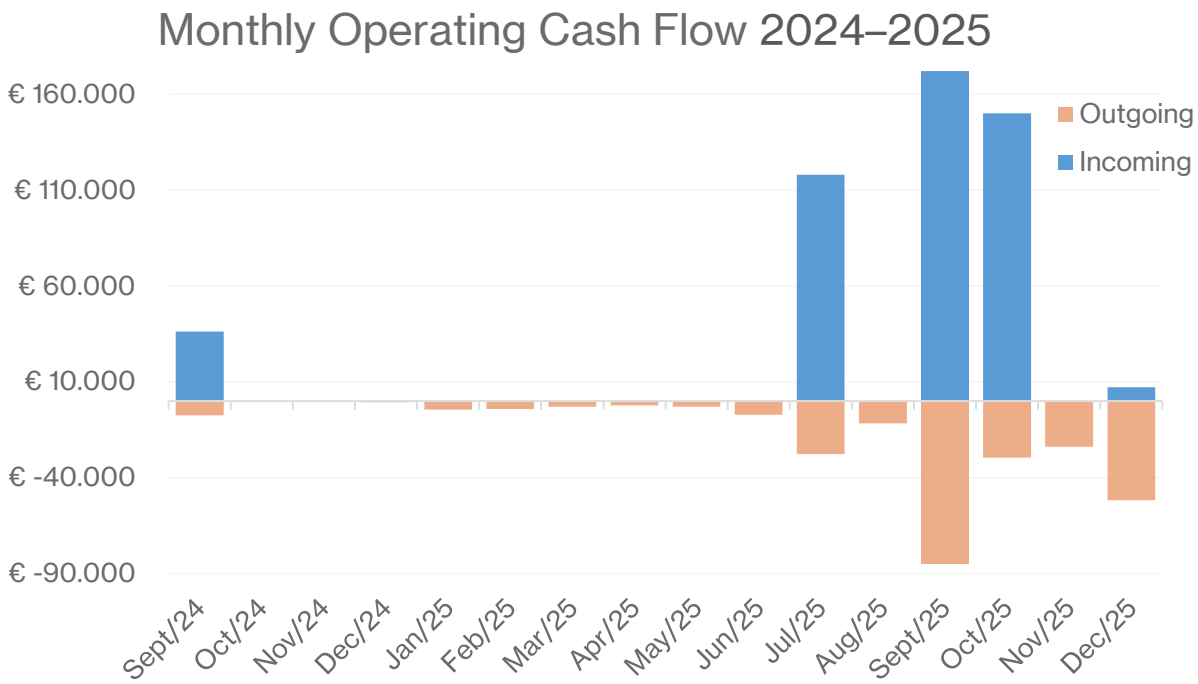
As of 31 December 2025, GenLumina's capital structure consists of the founding shareholders, a strategic equity participation from Leiden University, and the UNIIQ convertible loan. Founder equity reflects the initial capital contributions as well as the technical and operational work performed during the company's formation and early development. Leiden University holds a 15% minority equity stake in recognition of the intellectual property underlying GenLumina's light-activated therapeutic platform and the associated technology licensing agreement.

Equity structure as of 31/12/2025

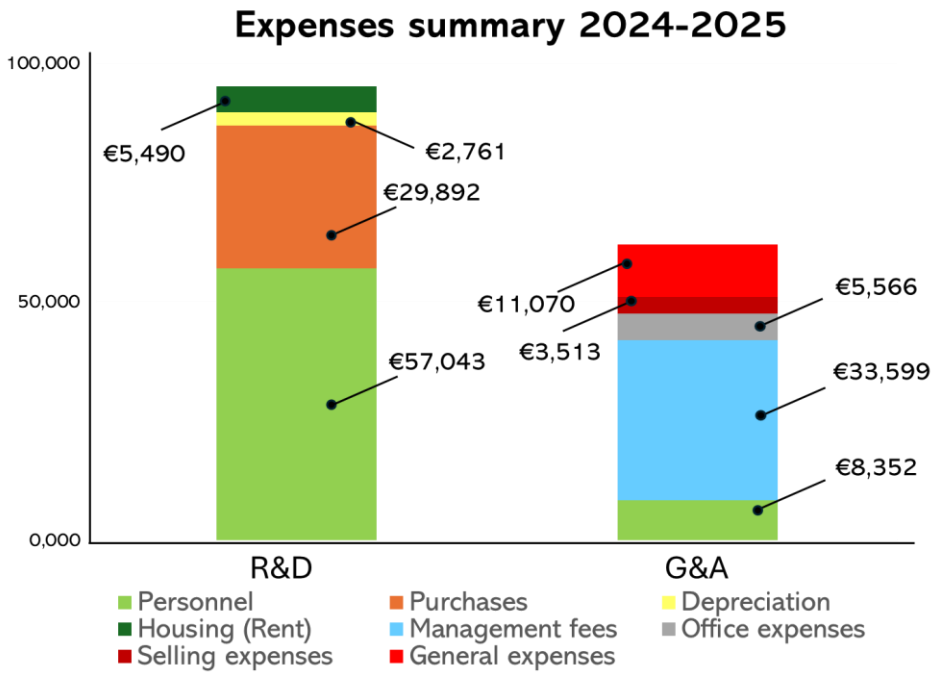


3. Operational Cost Allocation 2025

Operational cash flow reflects monthly operating cash inflows and outflows associated with the company's ongoing activities. This overview shows periods of limited operating expenses, with larger cash inflows in July, September and October supporting the company's operational runway.



The next chart illustrates the breakdown of operating expenses during the reporting period, distinguishing between Research & Development (R&D) and General & Administrative (G&A) costs.



R&D expenses represent the majority of total operating costs (€95.186) and are primarily driven by personnel costs and laboratory-related purchases. This reflects GenLumina's strategic focus on scientific validation and preclinical development of the SnB platform. Depreciation and facility-related costs represent a smaller proportion of R&D expenses and relate to investments in laboratory infrastructure.

G&A expenses remain comparatively limited (€62.100) and are largely attributable to management fees, general administrative costs, and office-related expenditures. Selling and commercial costs are minimal, consistent with the company's preclinical stage and its focus on scientific development rather than commercialization.

Overall, the cost structure demonstrates a disciplined allocation of resources toward research activities while maintaining a lean operational framework.

4. Cash Runway

GenLumina maintained a lean operating structure throughout 2025, with the majority of expenditures allocated to research and development activities, including laboratory personnel and experimental materials.

Following the initiation of experimental work and the activation of the Health-Holland

consortium project in mid-2025, the company's operating burn increased. This increase reflects the company's transition from organizational setup toward active scientific execution and platform validation.

Looking ahead, research and development expenditures are expected to increase as the company progresses toward in-vivo validation studies and chemistry, manufacturing, and controls (CMC) development. Internal estimates in collaborations with CDMOs indicate that advancing the platform toward GLP-compliant development will require approximately €3.5–€4.0 million.

Category	Estimated Cost (€)	Scope/ Description
CMC Development	2.6 million	Analytical method development, non-GLP batch manufacturing, formulation optimization
Non-Clinical Studies	0.8 – 1.0 million	Toxicology studies and in vivo validation of light-activated therapeutics
Total Estimated Budget	3.5 – 4.0 million	Foundation for GLP-compliant development by 2027

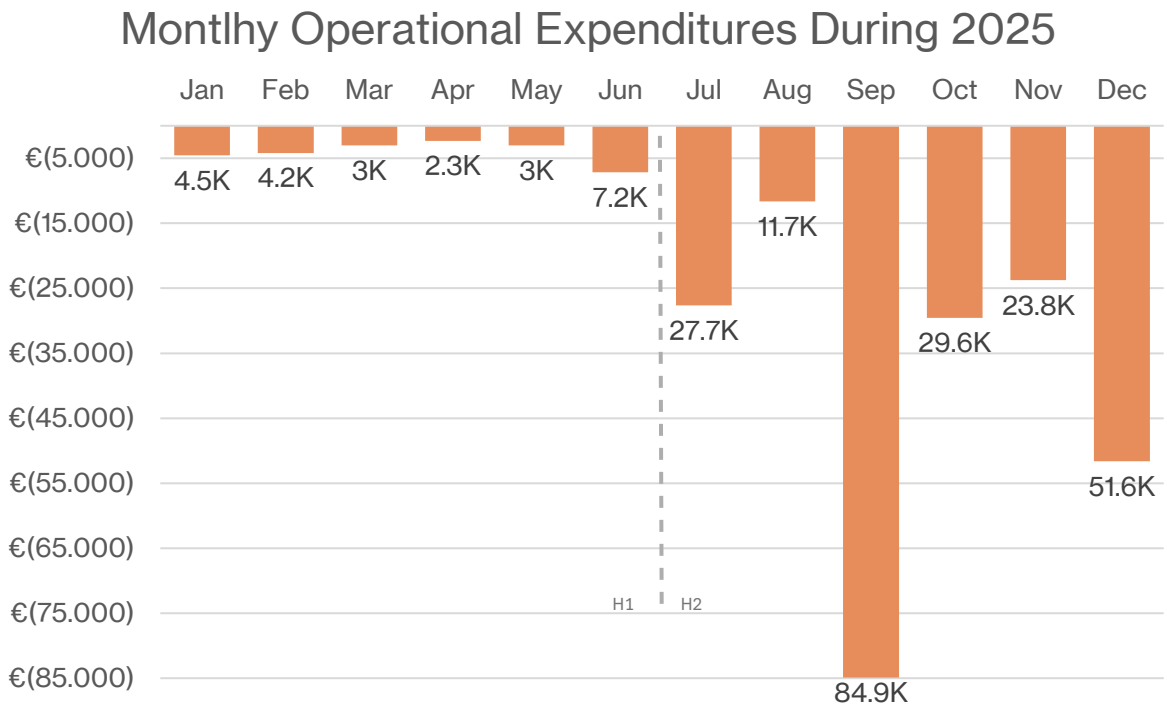
The company intends to pursue a combination of non-dilutive funding, strategic partnerships, and grant opportunities to support the continued development of its platform.

Monthly cash burn increased progressively throughout 2025 as GenLumina transitioned from initial operational setup to expanded laboratory activities and research execution.

During the first half of 2025, expenditure remained relatively modest while the company established its operational infrastructure and initiated core research activities. Average monthly cash burn during this period amounted to approximately €4.400.

In the second half of 2025, spending increased as laboratory activity intensified,

additional personnel were onboarded, and research programs progressed. Average monthly cash burn during this period increased to approximately €29.500, reflecting the scaling of GenLumina's scientific operations and the growing pace of development activities.



The increase in operating expenditures during the second half of 2025 primarily reflects the expansion of laboratory activities, preclinical research execution, and continued platform development in line with the company's operational roadmap.

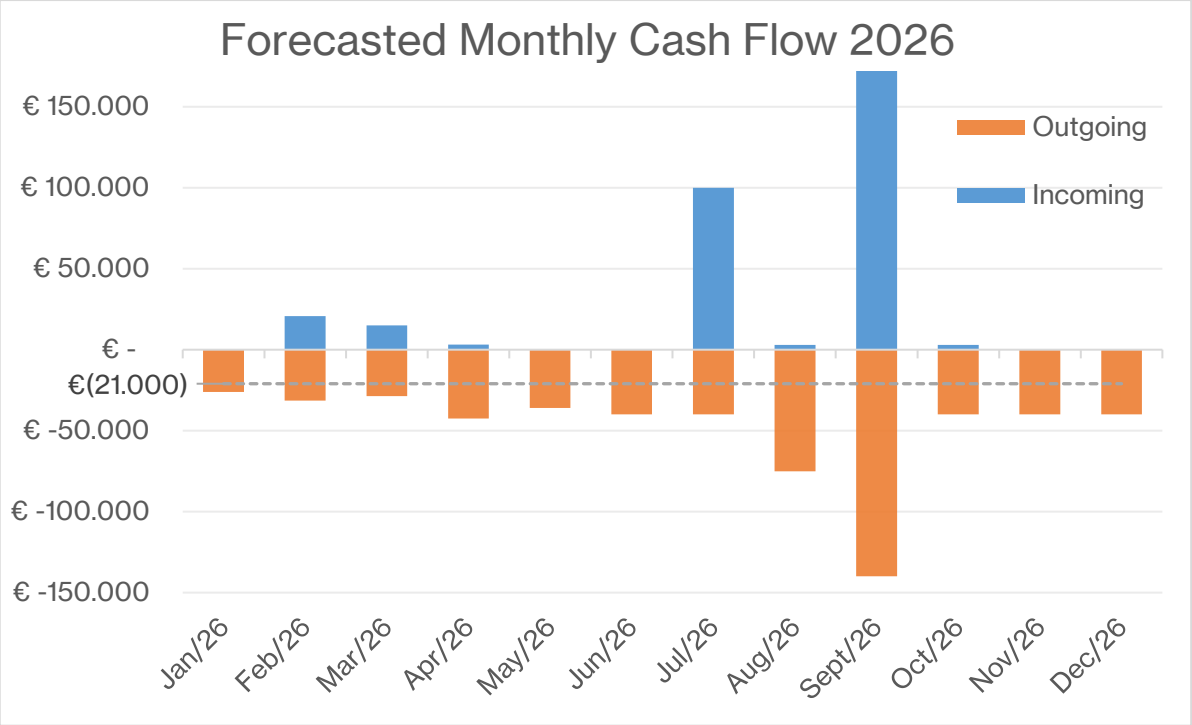
As of 31 December 2025, GenLumina held €221.791 in cash and cash equivalents.

Additional funding is expected during 2026 through previously secured financing instruments, including:

- €172.500 tranche from the Health-Holland grant, awarded in collaboration with LUMC, expected in Q3 2026, of which €130.000 is allocated to LUMC for project-related activities.
- €100.000 tranche from the UNIIQ convertible loan, expected in May 2026.
- €160.400 WBSO R&D tax incentive from the RVO for 2026.

Genlumina closed 2025 with a bank balance of approximately €221.791. In 2026, the

company expects to receive the final tranche of the UNIIQ convertible loan of €100.000 in July, followed by the second Health-Holland tranche of €172.000 in September. However, Genlumina also has several repayment obligations, including €35.000 to ELF and a total outstanding amount of € 130.000 to LUMC related to the Health-Holland subsidy arrangement.



Under the Health-Holland program, Genlumina is entitled to spend up to €300.000, while repayment to LUMC remains outstanding. Part of the Health-Holland funding structure includes project-related allocations associated with consortium activities at LUMC.

Based on current operational planning and expected committed inflows, GenLumina expects existing and secured financing to support ongoing development activities throughout 2026. The company intends to pursue additional financing opportunities during 2026 to support continued platform expansion, GLP preparation activities, and long-term development objectives.

5. Financial Position

During the extended financial period from 13 August 2024 through 31 December 2025, GenLumina reported a net loss of €38.339. The loss reflects early-stage investment in

R&D activities and foundational operational setup. No revenues were generated during the period, consistent with the company's preclinical development stage.

As of 31 December 2025, total assets amounted to €331.644, primarily consisting of cash €221.791 and laboratory infrastructure investments €61.544.

Total liabilities amounted to €368.783, primarily due to long-term convertible financing. Shareholders' equity amounted to €-37.139, reflecting the accumulated deficit associated with early-stage development activities.

Cash and cash equivalents at year-end totaled €221.791. The company remains dependent on external funding, grants, and strategic partnerships to finance ongoing preclinical development. Management continuously monitors liquidity and funding requirements to ensure operational continuity.

BALANCE SHEET

	GENLUMINA BALANCE SHEET 2024-2025	
Cash	€	221,791
Non current intangible assets	€	15,881
Non current tangible assets	€	61,544
Receivables	€	32,428
Total assets	€	**331,644**
Short term liabilities	€	115,912
Long term debt	€	252,871
Total liabilities	€	**368,783**
Total stockholders' equity	€	**-37,139**

INCOME STATEMENT

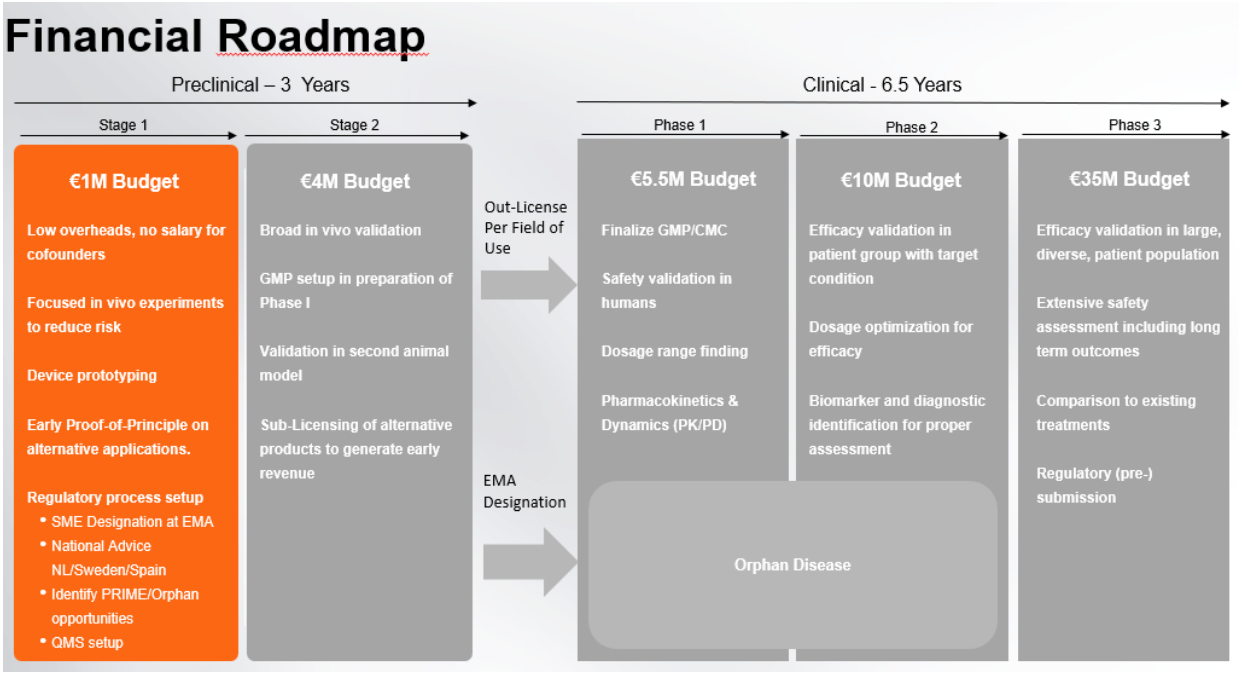
	GENLUMINA INCOME STATEMENT 2024-2025	
Operating expenses:		
R&D expenses	€	-95,186
G&A expenses	€	-62,100
Total Operating expenses	€	-157,286
Other operating incomes:		
Grants	€	128,400
Operating loss	€	-28,886
Financial items	€	-9,453
Net loss before taxation	€	**-38,339**
Tax Provision	€	-
Net Loss	€	**-38,339**

6. Financing Needs & Use of Funds

To progress from early preclinical validation toward GLP and IND/CTA-enabling readiness, GenLumina estimates a development budget of approximately €3.5-€4.0 million. This capital requirement should be linked to a staged financing strategy, combining equity investment, non-dilutive grants, strategic partnerships and potentially partner-funded programs.

Proposed use of funds: CMC analytical method development and formulation work; targeted construct optimization; tumor-bearing in vivo proof-of-concept; early safety, biodistribution and clearance studies; GLP toxicology preparation; regulatory advice; and business-development activities supporting program-level partnerships.

Expected value inflection: a partner-ready data package demonstrating targeted in vivo activity, manageable biodistribution and safety profile, feasible manufacturing/analytics, and a clarified regulatory path. These milestones are intended to support a larger financing round, strategic option-to-license discussions or co-development partnerships.



Risk Factors

Scientific & Technical Risks

Regulatory & Clinical Risks

Operational & Manufacturing Risks

Financial & Commercial Risks

Risk Factors

As an early-stage biotechnology company developing a novel light-activated oncology platform, GenLumina operates in a high-potential but inherently high-risk environment. The company's value creation depends on the successful validation of its technology across scientific, technical, regulatory, manufacturing and commercial dimensions. The following table summarizes the principal risks identified by management, together with their potential impact and the mitigation measures currently being pursued.

Scientific & Technical Risks			
Risk Area	**Description**	**Potential impact**	**Mitigation Strategy**
Technical Validation	The SnB platform is still in preclinical research and needs more in vivo and translational validation.	Extra optimization requirements or delays in development schedules.	Staged development milestones, ongoing in vitro and in vivo research, and employing well-established antibody and peptide conjugation technologies.
Light delivery & Penetration	Clinical effectiveness depends on controlled light activation and sufficient tissue penetration in targeted tumors.	Reduced efficacy in certain tumor locations or indications.	Development of optimized light-delivery systems and focus on initially accessible tumor indications.
Safety & Toxicology	Prior clinical translation, more toxicity and biodistribution research is needed.	Additional safety studies may be required before clinical progression.	Toxicology studies and early assessment of biodistribution, clearance, and immunogenicity profiles.

Regulatory & Clinical Risks			
Risk Area	**Description**	**Potential impact**	**Mitigation Strategy**
Regulatory Approval	Novel nanotechnology and light-activated therapies may require additional regulatory evaluation.	Extended regulatory timelines and increased development costs.	Phased regulatory planning and early interaction with regulatory organizations.
Clinical Translation	Preclinical results may not fully translate into clinical efficacy in humans.	Reduced therapeutic performance or delayed clinical advancement.	Validation across multiple tumor models and iterative optimization of treatment protocols.

Operational & Manufacturing Risks			
Risk Area	**Description**	**Potential impact**	**Mitigation Strategy**
Manufacturing & Scale-up	Manufacturing and quality-control issues could arise while scaling nanoformulations under GMP settings.	Delays in manufacturing readiness or increased production costs.	Early CMC planning, formulation optimization, and manufacturing partnerships.
Device Integration	Clinical implementation depends partly on compatible light-delivery technologies.	Delays in clinical workflow integration.	Collaboration with external device and imaging partners.

Financial & Commercial Risks			
Risk Area	**Description**	**Potential impact**	**Mitigation Strategy**
Funding & Liquidity	Continued development activities require external financing.	Delays or unsuccessful financing rounds could limit the company's ability to progress toward GLP and IND-enabling studies.	Extensive financing approach that combines equity investments, non-dilutive grants, and strategic partnerships
Clinical Workflow Integration & Adoption	Adoption of light-activated therapies may depend on integration into existing surgical, endoscopic, and image-guided oncology workflows.	Slower initial market adoption.	Workflow-compatible treatment approaches and collaboration with clinical centers.

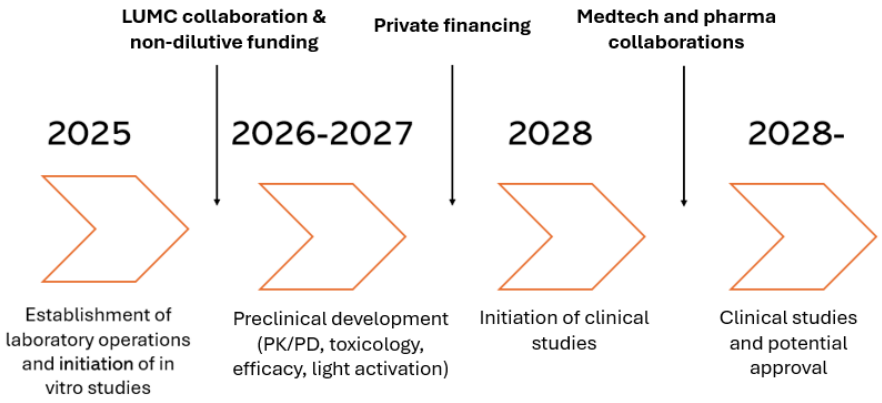
2026 Outlook

By the end of 2025, GenLumina had evolved from a university spin-out into an operational preclinical biotechnology company, with established academic partnerships, functional laboratory infrastructure, access to core intellectual property, and a clearly defined R&D and operational roadmap.

Entering 2026, the company's plan is focused on systematic de-risking of its light-activated therapeutic platform. Key priorities include validating targeted constructs, demonstrating tumor-bearing in vivo proof-of-concept for GL-001, expanding biodistribution and safety data, formalizing CMC and manufacturing partnerships, clarifying the regulatory pathway for a light-activated targeted therapeutic, and preparing a partner-ready data package for biopharma and medtech discussions.

In parallel, GenLumina will continue to strengthen its operational capabilities by attracting additional talent and expanding its network of scientific, clinical and regulatory advisors. The company will also pursue collaborations with pharmaceutical and medtech partners, alongside engagement with private investors and non-dilutive funding organizations, to support both technological progress and financial sustainability.

With this foundation in place, GenLumina is positioned to advance the SnB platform toward clinical translation. The company's long-term objective is to establish light-activated targeted therapy as a precise and locally controlled treatment modality that can improve outcomes for patients with solid tumors.



GenLumina B.V

Langegracht 70, 2312 NV Leiden, the Netherlands

Website: https://genlumina.com/

Chamber of Commerce : 94693943

CEO Signature:

Gerco Kanbier