

Valuation Report - SI053

June, 2025

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The Report provides an analysis of the potential value of SI-053, DBP's lead drug candidate for the treatment of glioblastoma, based on various assumptions, market research, and industry insights. It reflects the Company's current assessment and understanding of the market and product potential.

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Executive Summary

DBP June 2025

Valuation

Our current, as of June 2025, risk-adjusted valuation of SI-053 places its worth at USD 2–3 billion, accounting fully for remaining Phase I and Phase II clinical costs. Driven by orphan exclusivity, established safety from Temodex legacy use, and market-share assumptions, positive Phase II survival outcomes could rapidly elevate the asset's valuation into the USD 4–5 billion range, with further upside potential from expanded patient populations.

Pricing Strategy

SI-053 could be priced at USD 75,000 per single-use surgical kit, significantly below the total costs of alternative treatments like Tumour Treating Fields, which exceed USD 100,000. SI-053 achieves gross margins above 90%, ensuring strong profitability, flexibility in global price negotiations, and alignment with international cost-effectiveness standards.

Revenue Outlook

Based on current epidemiology, SI-053 could achieve annual peak sales of approximately USD 1.9 billion within five years of launch at a conservative 50% adoption rate. An optimistic scenario involving higher uptake and expansion into secondary brain tumour resections suggests peak annual revenues could reach USD 4.1 billion, translating into cumulative sales of USD 10–14 billion over the exclusivity period until 2038.

Net Present Value

Discounting expected cash flows at 15% back to 2025, SI-053 currently has an NPV of USD 2–3 billion. Significant valuation increases are expected upon positive Phase II efficacy results, potentially boosting the NPV by 40–60% to the USD 4–5 billion range. The primary remaining uncertainty is confined to clinical efficacy confirmation in Phase II, while regulatory risks are minimized by orphan-drug incentives and proven clinical use of the underlying Temodex formulation.

Acquisition & Licensing Scenarios

In a global licensing scenario, SI-053 could command upfront payments of USD 150–400 million, with additional milestone payments reaching USD 1 billion and royalties.

Alternatively, a full acquisition following positive Phase II data could value SI-053 at USD 1.5–4 billion, providing investors an attractive, well-defined exit pathway, particularly if competitive bidding occurs among companies seeking leadership in neuro-oncology.

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Abbreviations

BCNU – Carmustine, a chemotherapy drug used in Gliadel wafers.

CADTH – Canadian Agency for Drugs and Technologies in Health.

CAR-T – Chimeric Antigen Receptor T-cell therapy, a type of personalized cancer treatment.

CAGR – Compound Annual Growth Rate, a measure of annual market growth.

COGS – Cost of Goods Sold, referring to direct manufacturing expenses.

DBP – Double Bond Pharmaceutical, developer of SI-053.

DCVax-L – Dendritic Cell Vaccine, an experimental immunotherapy.

EMA – European Medicines Agency, responsible for drug approvals in the EU.

FDA – U.S. Food and Drug Administration, regulator of drugs in the United States.

GBM – Glioblastoma Multiforme, a highly aggressive grade IV brain tumor.

GMP – Good Manufacturing Practice, standards for drug manufacturing quality.

HTA – Health Technology Assessment, evaluating the cost-effectiveness of treatments.

ICER – Incremental Cost-Effectiveness Ratio, a measure used in economic evaluations; also Institute for Clinical and Economic Review in the U.S.

MGMT – O6-methylguanine-DNA methyltransferase, a gene affecting chemotherapy response.

MTD – Maximum Tolerated Dose, the highest drug dose patients can safely receive.

NCCN – National Comprehensive Cancer Network, a U.S. organization setting cancer treatment guidelines.

NICE – National Institute for Health and Care Excellence, a UK agency evaluating cost-effectiveness.

ODD – Orphan Drug Designation, regulatory status granting market exclusivity.

OS – Overall Survival, the duration patients live after treatment begins.

QALY – Quality-Adjusted Life Year, a metric for evaluating treatment effectiveness.

RT – Radiotherapy, a standard cancer treatment method.

SEK – Swedish Krona, currency of Sweden.

SOC – Standard of Care, the conventional or established treatment.

TMZ – Temozolomide, a chemotherapy drug used for glioblastoma.

TTFIELDS – Tumor Treating Fields, a therapy using electric fields to disrupt tumor growth (Optune device).

WHO – World Health Organization.

1. Introduction & Background

Glioblastoma (WHO grade IV) is the most common and aggressive primary brain tumor in adults, with an incidence of approximately **3–5 per 100,000** person-years in the US and EU. Despite multimodal therapy, GBM carries a grim prognosis – median survival is only about **12 months** from diagnosis even with maximal surgery, radiation, and chemotherapy. Globally, GBM causes roughly **200,000 deaths per year**, including an estimated **16,000 in Europe** and **10,000 in the US**, underscoring the high unmet need. Standard first-line treatment (the Stupp protocol) involves surgical resection of the tumor followed by radiotherapy with concurrent and adjuvant temozolomide (an oral alkylating agent). This regimen modestly improved outcomes in a landmark trial: median overall survival (OS) increased from **12.1 months to 14.6 months** with the addition of temozolomide to radiation. However, many patients (especially those with unmethylated MGMT promoter status) derive limited benefit from systemic temozolomide due to the drug's inability to achieve high brain concentrations and tumor resistance mechanisms.

Temodex and SI-053: Temodex is a locally applied temozolomide gel developed in Belarus to overcome the limitations of oral temozolomide. In a small Phase II study in Belarus, adding Temodex to standard therapy demonstrated a significant improvement in survival – **overall survival was prolonged by up to 39 weeks (~9 months)** compared to standard therapy alone. Notably, this benefit was observed regardless of MGMT methylation status, suggesting local delivery of temozolomide can bypass a key resistance factor. Temodex has been used as first-line treatment for GBM in Belarus since 2014. Double Bond Pharmaceutical (DBP) acquired rights to Temodex in October 2015 and reformulated it as “SI-053” for Western development. SI-053 uses a biocompatible **dextran phosphate hydrogel** to encapsulate temozolomide, allowing the drug to be **placed directly into the resection cavity** at surgery. The hydrogel slowly biodegrades, releasing high local doses of temozolomide over time. By concentrating chemotherapy at the tumor site, SI-053 aims to **kill residual tumor cells** and prevent recurrence, with minimal systemic toxicity. This approach parallels the rationale of Gliadel® (carmustine wafers), another localized post-surgery chemotherapy, but SI-053 delivers temozolomide (a proven agent in GBM) in a novel way focusing on ease of use for surgeons.

Double Bond Pharmaceutical (DBP) has obtained **Orphan Drug Designation (ODD)** for SI-053 in glioblastoma from the European Medicines Agency (granted July 2016), which will confer 10-year market exclusivity in the EU upon approval. ODD status is also anticipated in the US (which typically provides 7 years of exclusivity) given GBM's incidence is well below the orphan threshold and the significant unmet need. SI-053 is the company's flagship product and has completed preclinical development. Regulatory and ethics approvals for a Phase I clinical trial were obtained in 2023, and **First-in-Human Phase I trials begin in Q3/Q4 2025** in Europe. The current development timeline targets a **market entry by 2028–2029**, assuming successful Phase II trial and regulatory reviews. This report will analyze SI-053's value proposition in this context.

2. Clinical Development Plan and Timeline

Development Status: SI-053 completed extensive preclinical testing, including animal studies on local drug distribution and safety. By late 2023, DBP received regulatory approvals to initiate human trials. A European multicenter **Phase I trial** will begin enrolment in late 2025 (open-label dose-escalation in patients with recurrent or newly diagnosed GBM). The goal is to establish SI-053's safety profile, determine the maximum tolerated dose (MTD), and confirm the release kinetics in humans. Phase I costs are projected around **SEK 40–50 million** (Swedish Krona), i.e. roughly \$4–5 million USD – consistent with a small, hospital-based trial involving up to 27 patients. DBP has secured manufacturing of clinical trial material under EU GMP, having optimized the dextran phosphate gel production in 2024. In practice, as there is legacy data from Temodex, the Phase I trial is mostly a formality and does not carry with it any significant risk of failure.

Phase II Outlook: Assuming Phase I identifies a tolerable dose, **Phase II** would likely start by 2026. Given GBM's orphan status, regulators may allow a combined Phase II/III or an adaptive design to expedite development. Phase II might enrol ~70–140 patients to get preliminary efficacy (perhaps comparing SI-053 plus SOC vs SOC alone, likely focusing on end-points like 6-month progression-free survival and safety). We estimate Phase II trial costs on the order of **SEK 200–250 million** (\$20–25M). DBP expects to file for approval in 2027/2028, targeting **market approval in the same period**.

Regulatory and Orphan Advantages: Orphan Drug status in the EU and anticipated in the US will streamline interactions with regulators. Orphan designation provides **fee reductions** and eligibility for protocol assistance from EMA, as well as **7 years (US) and 10 years (EU) of market exclusivity** upon approval. The **10-year EU exclusivity** can prevent similar products from being approved in the same indication, regardless of patent status, thus protecting SI-053 from direct competition (e.g. another company attempting a temozolomide gel) until at least 2038 in Europe. In the US, the **7-year exclusivity** (potentially longer if one includes pediatric extension) would protect the product likely through late-2030s. These exclusivities are a critical part of the valuation, as they ensure that SI-053 – if first to market as a locally delivered temozolomide – will enjoy a monopoly in its niche for a significant period. It is worth noting that temozolomide as a molecule is generic, so **patent protection must rely on formulation and use patents**. DBP has secured patents in various jurisdictions for the Temodex/SI-053 formulation – for example, a Canadian patent was granted in 2024 extending coverage **until at least 2036**. Patents in the EU, US, Brazil, Mexico and others are in progress or granted. Additionally, DBP plans a **second patent family** focusing on the delivery system and novel combination uses, which could potentially extend IP protection into the **late 2030s or 2040**. For our financial model, we will assume exclusivity (via orphan or patents) through 2038 globally.

Market Entry and Adoption: If approved in 2028, SI-053 could initially launch in Europe (potentially via a centralized EMA approval) and in the US via FDA approval around the same time. Given the critical need in GBM, **fast-track or priority review** designations are

likely in the US, which could compress review time. The EU orphan exclusivity provides **10 years of market exclusivity from approval** (which could be extended if SI-053 also obtains a pediatric indication or waiver). Orphan exclusivity will help SI-053 command a premium price and face no direct competition in its niche (e.g., a generic temozolomide gel would not be allowed during that period for the same indication).

By 2029–2030, we expect SI-053 to start generating significant revenue. Doctors will need minimal education on using the product: it will be sold as a **sterile kit for neurosurgeons** to implant during surgery. The procedure to apply the gel is straightforward (applying the gel into the cavity), adding only minutes to surgery time. Early adopters will be major neuro-oncology centers; over a few years, usage could expand to most centers that treat GBM, especially if practice guidelines incorporate SI-053 for resected tumors.

3. Current Treatment Landscape and Competing Therapies

Standard of Care (SOC): The SOC for newly diagnosed GBM remains maximal safe surgical resection followed by radiotherapy with concurrent and adjuvant temozolomide (the Stupp regimen). As noted, this provides a median OS around **14–16 months** for unselected GBM patients. Temozolomide's benefit is largely limited to patients with MGMT-methylated tumors (about 40–50% of GBMs); those with unmethylated MGMT derive minimal survival improvement (median OS ~12 months, similar to radiation alone). Moreover, because oral temozolomide must cross the blood-brain barrier, only a small fraction of each dose reaches the tumor site. Systemic side effects (especially hematological toxicity) can also limit dosing. There is a recognized need for therapies that **increase drug delivery to the tumor** without increasing systemic toxicity.

Gliadel Wafer (Carmustine implant): This is an FDA-approved local therapy for GBM, in use since the late 1990s. Gliadel wafers are biodegradable polymer discs impregnated with carmustine (BCNU) that are implanted into the resection cavity at the time of surgery. They release chemotherapy over ~2–3 weeks. Gliadel was first approved for recurrent GBM in 1996 and later (2003) for newly diagnosed GBM as an adjunct to surgery and radiation. In clinical trials, Gliadel provided a modest survival benefit: in newly diagnosed GBM, median survival improved from **11.6 months to 13.9 months** with Gliadel (an increase of ~2.3 months). Gliadel's use has also been limited by local side effects (e.g. edema, healing complications) and the fact that carmustine wafers add cost without dramatically extending life. The **cost of Gliadel** is significant – up to 8 wafers can be placed, and a full course can cost on the order of **\$40,000** – though exact pricing varies by country. Overall, Gliadel demonstrated the feasibility of local chemotherapy but has not become standard for all patients due to its limited benefit.

Tumor Treating Fields (Optune): A more recent adjunct therapy for GBM is **Tumor Treating Fields (TTFields)**, a non-invasive device (Optune® by Novocure) that delivers low-intensity alternating electric fields via scalp electrodes. TTFields therapy is worn by the patient continuously for months. In the pivotal EF-14 Phase III trial, adding TTFields to maintenance temozolomide significantly improved survival: it reduced the risk of death by

37% and **extended median overall survival by ~5 months** (from 16 months to 21 months) in newly diagnosed GBM. Two-year survival rates increased from 30% to 43% with TTFields, a notable gain for this disease. TTFields is now approved and included in NCCN guidelines as an option after chemoradiation. However, uptake has been moderate – reasons include the burdensome nature of the therapy (patients must shave their head and wear the device ~18 hours a day for many months) and its **high cost**. Optune's device therapy is priced around **\$21,000 per month**, and patients in trials used it for a median of ~3.5 months, meaning total treatment costs can exceed \$70,000 per patient. Many health systems grapple with the cost-effectiveness of TTFields given this expense. Still, TTFields demonstrates that adding an effective adjunct can meaningfully extend survival in GBM.

Emerging Systemic Therapies: Aside from temozolomide and TTFields, there are few FDA-approved therapies for newly diagnosed GBM. Bevacizumab (Avastin®) is approved for recurrent GBM in the US, but it has not shown OS benefit in newly diagnosed disease. Experimental approaches – e.g. cancer vaccines (such as DCVax-L), targeted drugs, CAR-T cells, gene therapies – are in trials, but none have yet become part of standard first-line treatment. As of 2025, **SI-053 faces limited direct competition** in the specific niche of local chemotherapy for GBM, with Gliadel being the only analogous product on the market. SI-053's value will depend on demonstrating a superior survival benefit to Gliadel (and systemic therapy alone) and positioning itself as a complementary addition to the SOC (potentially used **in combination with surgery, radiation, and even TTFields or other therapies**).

Comparative Survival Benefit:

- **Standard Therapy (Surgery + RT + Temozolomide):** Median OS ~14–16 months; baseline cost for temozolomide (generic) is relatively low (a full course of TMZ costs a few thousands of dollars).
- **+ Gliadel Wafer:** Adds ~2 months OS (median ~13.9 vs 11.6 mo); cost ~\$40k; use limited due to modest benefit.
- **+ TTFields (Optune):** Adds ~4 months OS (median ~20 vs 16 mo); 2-year survival improved 13%; cost very high (>\$100k per patient).
- **+ Temodex/SI-053:** In a Phase II trial (Temodex in Belarus) OS improved by up to ~9 months vs SOC. Cost is projected at **~\$75,000 per patient** (assumed launch price), which is **competitive** given its one-time application and substantial efficacy. SI-053 also promises **lower systemic side effects** (due to localized delivery) and is a single-dose treatment applied during surgery, which is more convenient than months of device therapy or repeated infusions.

In summary, SI-053 has the potential to **combine the advantages** of existing therapies: like Gliadel, it provides localized post-surgical chemotherapy (but with a more effective drug, temozolomide, rather than BCNU); and its survival benefit in early studies (~9+ months) greatly exceeds that of TTFields, at a fraction of the ongoing cost and without continuous

burden on the patient. These differentiators support a strong value proposition if clinical trials validate the efficacy and safety.

4. Market Outlook

Addressable Patient Population: The initial target indication for SI-053 is **newly diagnosed glioblastoma** patients who undergo surgical resection of their tumor. Surgical resection is feasible in an estimated **50–70%** of GBM cases (the remainder may only get a biopsy due to tumor location or patient condition). In high-income markets, the majority of GBM patients will have surgery as part of care. Based on epidemiology:

- **United States:** Incidence ~4 per 100,000, translating to roughly **13,500 new GBM cases per year**. Assuming ~60% are surgically resectable, about **8,000 patients** annually could be candidates for SI-053 in the US.
- **European Union (EU27):** Incidence ~5 per 100,000; with ~448 million population, roughly **22,500 new cases/year**. Operable cases might be **13,500** per year in the EU.
- **Rest of World:** GBM incidence is lower in some regions but given population size, globally there may be on the order of **60,000–80,000 new GBM cases per year**. However, access to neurosurgery and advanced therapies in developing countries is limited. We expect initial commercialization focus on North America, Europe, and select Asia-Pacific markets (Japan, etc.). Japan, for instance, sees ~2–3k GBM cases/year. In total, a reasonable estimate for the **global annual addressable GBM population** (with access to surgery) is on the order of **50,000 patients** in the late 2020s, growing modestly with population aging.

Potential Expansion to Secondary Brain Tumors: A major upside for SI-053 is the potential use in **secondary brain tumors (brain metastases)**. Brain metastases are far more common than primary brain tumors; in the U.S. alone, an estimated **170,000 new cases of brain metastasis are diagnosed annually**. Common primaries include lung, breast, and melanoma. While most brain metastases are treated with radiotherapy (whole-brain or stereotactic radiosurgery), a subset of patients with one or few large metastases undergo surgical resection for symptom relief or when tumors are accessible. In those cases, applying SI-053 into the resection cavity could help control residual disease locally. Gliadel wafers have occasionally been used off-label in resected metastases, and small studies indicate it is safe. There is a clear rationale that **localized temozolomide** could also be beneficial in resected metastases to prevent regrowth (notably, temozolomide is an active drug in some metastatic cancers like melanoma or metastatic astrocytoma, though less so in others). If SI-053 pursues a label expansion to include “patients undergoing resection of brain tumors, including metastases,” the addressable population could roughly **double or triple**. Even if only 10–20% of the 170k metastatic cases get surgery, that is ~17,000–34,000 potential additional patients in the US per year (perhaps similar in EU).

This **secondary market** could thus be quite large, though it may require additional clinical trials to establish efficacy in metastases.

Market Growth and Trends: The GBM therapy market was estimated around **\$950 million in 2022** and is projected to grow to ~\$2.3 billion by 2029 (CAGR ~12%). Drivers include an aging population (GBM incidence increases with age), improved diagnosis (more MRIs leading to detection), and the introduction of new therapies commanding premium pricing. If SI-053 launches around 2028, it would enter a market that likely exceeds \$1.5–2 billion in annual value (across surgery, radiation, chemo, devices, etc.). Being an **add-on therapy** to surgery, SI-053's adoption will depend on neurosurgeons and neuro-oncologists incorporating it into the standard surgical workflow. Given the dire prognosis of GBM, **market penetration could be rapid** if Phase II data show a clear survival advantage, as there are few alternatives. We assume SI-053, if approved by 2028, would initially gain uptake in major academic centers and thereafter quickly diffuse to community hospitals with neurosurgery capabilities. Additionally, orphan drug designation and the lack of direct competitors mean SI-053 could achieve **significant market share** among eligible patients.

5. Pricing Strategy

A proposed one-time price of \$75,000 (USD) for SI-053 is well-justified when compared to existing and emerging glioblastoma treatments. Current standard-of-care adjuncts for GBM are extremely costly relative to the survival benefit they provide:

- Tumor Treating Fields (Optune) – This wearable device prolongs median survival by ~4 months in GBM but is priced around \$21,000 per month, typically used for several months. A full course often exceeds \$100,000 per patient. Health agencies have noted Optune's steep cost and poor cost-effectiveness (e.g. ~\$900,000 per QALY gained at list price), calling into question its value for money. In many countries, Optune is *not* reimbursed due to these economics, despite its clinical benefit.
- Gliadel Wafer (carmustine implant) – This surgically implanted polymer wafer delivers local chemotherapy and was the first localized GBM therapy. Gliadel provides only ~2 additional months of survival, and up to 8 wafers may be used per surgery. A full treatment of Gliadel costs on the order of \$40,000 in the U.S. NICE in the UK initially did not recommend Gliadel for newly diagnosed GBM because its cost (~\$45K) vs. benefit led to an unfavorable cost per QALY (e.g. ~\$115,000 per QALY, far above conventional thresholds). This illustrates that even a moderate price must be justified by substantial efficacy.
- Emerging GBM Immunotherapies (e.g. vaccines like DCVax-L) – Personalized cell therapies for GBM are expected to be very expensive. For example, a dendritic cell vaccine Provenge (for prostate cancer) launched at \$93,000 for a course of therapy, corresponding to roughly \$23k per month of life extended. A similar autologous

vaccine for GBM would likely be priced in the six figures given complex manufacturing. Indeed, analysts predict manufacturing autologous GBM vaccines or CAR-T cells costs ~\$20K per patient, implying prices well above that (>\$100K) to ensure profit. We anticipate DCVax-L, if approved, would seek a premium price (perhaps in line with Provenge or higher) due to its individualized nature.

- **CAR-T and Gene Therapies** – While still in trials for GBM, any successful gene or cell therapy would set a new price benchmark. CAR-T cell therapies in oncology already cost \$373,000–\$475,000 *per treatment* in the U.S. These are ultra-orphan, transformative treatments for hematologic cancers. A CAR-T for GBM – affecting a small patient pool – could similarly command several hundred thousand dollars. Likewise, novel gene therapies (e.g. oncolytic viral therapies) for rare cancers often launch at \$1–2 million for one-time treatment, as seen with other orphan gene therapies in neurology. In this context, SI-053’s \$75K one-time price is comparatively modest. It delivers a potentially significant survival gain (~9+ months in early data) with a single surgery-integrated treatment, positioning it below the cost of other cutting-edge therapies like Optune or any future personalized cell therapies.

In summary, a \$75,000 price point for SI-053 is aligned with or lower than key GBM therapy benchmarks. It is roughly on par with the total cost of a course of Optune (which exceeds \$100K) and modest next to six-figure experimental therapies. Yet SI-053 would offer greater convenience (one-time use) and potentially larger survival benefits than these alternatives. This benchmark analysis validates \$75K as a reasonable, value-based launch price in the context of the current GBM treatment landscape.

5.1 Comparable Orphan Oncology Drug Pricing

SI-053’s pricing strategy also reflects the broader market for orphan-designated cancer therapies, which typically carry premium pricing due to small patient populations and high R&D costs. Glioblastoma is an orphan disease (incidence ~3-5 per 100,000), and pricing in this range is consistent with orphan oncology norms:

- **High Cost is Common for Orphan Drugs:** The average annual cost of an orphan drug in 2017 was about \$187,000, roughly *25 times* the cost of non-orphan drugs. Orphan cancer therapies often exceed \$100K–\$200K per patient. For example, the targeted drug larotrectinib (Vitrakvi, for NTRK fusion cancers) launched at ~\$32,000 per month (>\$190K/year) for a rare population. Many enzyme replacement therapies for ultra-rare cancers or metabolic disorders cost in the \$200-700K per year range. In this light, SI-053’s one-time \$75K cost (even if a patient receives it once in a lifetime) is well below the annualized costs of many orphan treatments.
- **CAR-T Cell Therapies:** As noted, CAR-T therapies like Yescarta and Kymriah (for refractory leukemias/lymphomas) cost \$373K–\$475K for a single infusion. These therapies serve only a few hundred to a few thousand patients per year (similar

order of magnitude as GBM) and were still able to obtain reimbursement at those prices because of their significant efficacy. SI-053, with an orphan designation and potentially life-extending benefit, is modestly priced at a fraction of CAR-T levels.

- **Gene Therapies:** The costliest therapies on the market are one-time gene therapies for rare diseases (often non-oncologic), which have been priced at \$1–2 million per patient (e.g. Zolgensma at \$2.1M for spinal atrophy, Luxturna ~\$850K for a rare blindness). While neuro-oncology has not yet seen such gene therapy launches, this trend in orphan pricing underscores the ability to charge very high prices when no alternatives exist. SI-053's \$75K is orders of magnitude lower, yet addresses a lethal disease – a compelling value argument.
- **Cancer Vaccines & Novel Modalities:** Sipuleucel-T (Provenge), the first FDA-approved cancer vaccine, was priced at \$93,000 for a three-dose course, for an average ~4 month survival extension in prostate cancer. Notably, Provenge faced pushback in some markets (e.g. England's NICE declined it) because of uncertain comparative benefit. In contrast, SI-053 leverages a well-known agent (temozolomide) and showed a robust efficacy signal (7+ month survival gain) in early studies – supporting a premium price. Other orphan oncology drugs with limited populations (e.g. blinatumomab for ALL, mifamurtide for osteosarcoma, etc.) frequently launch above \$100K. The \$75K pricing for SI-053 is squarely within the acceptable range for orphan oncology therapeutics that demonstrate tangible patient benefit.

Overall, orphan drug pricing benchmarks indicate that premium pricing is the norm. Pharma companies recoup development costs from a smaller sales base by setting higher per-patient prices. SI-053 can confidently target ~\$75,000+ given that analogous orphan oncology products often far exceed this level. Importantly, this price still positions SI-053 as cost-effective relative to peers, as discussed next.

5.2 Health Technology Assessment and Cost-Effectiveness Considerations

When proposing \$75,000 per treatment, it is critical to demonstrate that SI-053 will be cost-effective and acceptable to payers and health technology assessment (HTA) agencies. Several real-world HTA findings support the case that SI-053's price can be justified by its health outcomes:

- **Cost per QALY vs. Optune:** Using standard cost-effectiveness metrics, SI-053 is likely to fare much better than Optune (TTFields). CADTH (Canada's HTA agency) evaluated Optune and found an incremental cost-effectiveness ratio of ~\$900,000 per QALY for Optune added to chemo, at its \$27K/month price. This vastly exceeds typical willingness-to-pay thresholds (e.g. \$50-150K/QALY). In contrast, if SI-053 is priced at \$75K and delivers, say, ~0.5 additional quality-adjusted life-years (QALY) (roughly equivalent to 6 months of perfect health gained), the cost per QALY would be ~\$150,000. Even with conservative assumptions, SI-053's ICER would likely fall

near or below \$100,000/QALY, which is within acceptable ranges in the US and for severe diseases in Europe. For example, NICE in the UK often uses a base threshold of ~£30,000/QALY, but for end-of-life or orphan conditions it can consider higher values (£50–60K+ per QALY). SI-053, treating a terminal cancer with no cure, would qualify for these higher thresholds. We anticipate that SI-053 can demonstrate an ICER well below those of Optune or other pricey alternatives, easing its path through HTA reviews.

- **NICE and Carmustine Wafer:** The case of Gliadel wafer in NICE guidance is instructive. Initially, NICE deemed carmustine wafers not cost-effective for newly diagnosed GBM given a modeled ICER ~£57,000 per QALY (and ~£37,000 in a subgroup). That was at a price of ~£4–5K per wafer in 2005. In comparison, SI-053 is expected to add significantly more survival time than Gliadel. If SI-053 delivers ~9 months OS benefit, its cost per life-year gained will be far superior. HTA agencies could thus view \$75K as acceptable for the magnitude of benefit. Notably, NICE has special provisions for end-of-life treatments: if a therapy extends life for patients with <24 months life expectancy, a higher cost/QALY can be accepted. SI-053 squarely falls in this category (GBM median survival ~15 months). Thus, we expect favorable HTA consideration, especially if our Phase III data confirm a substantial survival improvement.
- **Precedents with Expensive Therapies:** Regulators and HTA bodies have shown willingness to approve and reimburse very expensive orphan oncology drugs when they offer a clear benefit. For example, NICE eventually approved CAR-T therapies like Yescarta for NHS use after confidential discounts, despite list prices near £300,000, because they can induce durable remissions. Similarly, Medicare in the US decided to cover Provenge at \$93K given the lack of alternatives for advanced prostate cancer. These decisions underscore that “value” is judged by outcomes, not price alone. In SI-053’s case, a therapy that can be delivered during routine surgery and potentially improve survival by over 6 months provides significant value in GBM – a disease where every extra month is precious. We believe HTA agencies (NICE, CADTH, etc.) will find SI-053’s cost-per-QALY justifiable, especially if priced in the ~\$75K range which is lower than many peers. Orphan drug status may further tilt assessments in SI-053’s favor, as some agencies allow higher thresholds for rare diseases.

In summary, our pricing takes into account the lessons from HTA reviews: SI-053’s price is set to balance revenue needs with cost-effectiveness. At \$75K, we anticipate most HTA bodies will consider it an acceptable or even attractive value proposition, given the high burden of GBM and lack of better options. Early payer engagement and pharmacoeconomic modeling will be pursued to solidify this case (e.g. preparing dossiers for NICE, CADTH, ICER, etc., incorporating real-world evidence). We will also emphasize SI-053’s single-administration convenience, which avoids the long-term ancillary costs that devices like Optune incur.

5.3 Manufacturing Cost Structure and Orphan Drug Margins

Another factor supporting a \$75K price is the low cost-of-goods for SI-053 and generally high margins seen with orphan drugs. SI-053 is composed of generic temozolomide and a dextran-based gel, both relatively inexpensive materials. The manufacturing process (sterile gel preparation, filling, etc.) is straightforward and does not involve exotic biologics or personalized cell handling. We estimate cost of goods per treatment in the low thousands of dollars – likely on the order of <\$5,000 per dose, depending on final gel volume and drug content. Temozolomide itself is inexpensive: generic temozolomide capsules for an entire cycle of systemic therapy cost only a few hundred dollars in most markets. Even allowing for manufacturing overhead, the COGS for SI-053 should remain well under 10% of the \$75K price.

This implies gross margins on the order of 90%, consistent with other orphan drugs. For context, orphan drug companies average ~86% gross margins, versus ~75% for non-orphan pharma. High margins are typical in rare diseases to offset the small volume. SI-053 will fit this profile, yielding a healthy return that justifies the R&D investment. For example, if SI-053 nets ~\$70K in revenue per patient with a \$7K cost, the gross profit is ~\$63K per patient (gross margin 90%). Such economics are essential for an orphan therapy and will attract potential partners or acquirers to the program. Additionally, high margin products give flexibility for patient support programs or tiered pricing if needed, while still maintaining profitability.

It's worth noting that low manufacturing cost is a double-edged sword: it enables high margin, but HTA/payers will be aware and expect that the price is justified by value, not cost. We cannot price purely on COGS plus a small markup (that would undervalue the therapy's benefit), but we also must be prepared to show that the price is not exploitative. In this regard, SI-053's price is driven by the significant clinical benefit it aims to provide, not the production cost. Many approved orphan oncology drugs have production costs a small fraction of their price – for instance, CAR-T cell therapies cost an estimated ~\$20K to manufacture but are priced ~20 times higher. Enzyme replacement therapies costing \$300K/year often have far lower manufacturing costs as well. Payers generally accept this reality for orphan drugs, provided there is transparency and outcomes. We will ensure our pricing narrative highlights the innovation and patient value of SI-053, while our cost structure allows generous margin to reinvest in further GBM research and patient support.

5.4 Reimbursement Outlook in Major Markets

Achieving reimbursement at ~\$75,000 per treatment will require navigating different healthcare systems, each with its own considerations. We have analyzed the major markets and find that SI-053's orphan designation and clinical profile position it well for reimbursement approvals:

- United States: In the US, there is no central price regulator – manufacturers have freedom to set list prices, and payers (private insurers and Medicare) make

coverage decisions. Orphan cancer drugs with FDA approval are almost always covered by insurance due to the lack of alternatives, though often with prior authorizations or through specialty pharmacies. We anticipate SI-053 will be covered by Medicare and commercial plans as a surgical adjunct for GBM, especially if Phase III data are strong. Medicare has in the past granted coverage to costly oncology treatments like CAR-Ts (with special new technology add-on payments in hospitals) and Provenge (despite \$93K cost). Private payers may negotiate rebates or monitor utilization, but given GBM's lethality, they are unlikely to deny coverage for an FDA-approved, guideline-endorsed therapy. Our U.S. pricing strategy may involve a slightly higher list price (e.g. \$80K) knowing that discounts and rebates could bring net realized price closer to ~\$75K. The presence of the Orphan Drug Act incentives (7-year exclusivity, tax credits) in the US also supports a premium price. ICER, a U.S. cost-effectiveness watchdog, may evaluate SI-053, but ICER's influence is indirect; even if ICER were to call our price high, payers often cover orphan drugs due to patient and physician pressure if the clinical need is critical. Overall, we are confident in US reimbursement at our target price, with minimal price erosion in the early years post-launch.

- Europe (EU5 and others): Europe's single-payer systems will require demonstrating value to national payers and HTA bodies, but the EU Orphan Drug designation (10-year exclusivity) gives us a strong hand. Orphan drug pricing in Europe can be favorable: many EU countries allow higher prices for orphan or "ultra-innovative" therapies, sometimes via specialized pathways. For instance, in Germany, orphan drugs under a certain revenue threshold are exempt from the full AMNOG HTA process initially – they effectively get reimbursement at the manufacturer's price during the first year on the market, after which price negotiations occur. SI-053's small patient population means it could benefit from this policy and achieve a high initial price in Germany. In England, NICE will review SI-053 (likely through a Technology Appraisal). Given GBM's lack of options, SI-053 could qualify under NICE's "End of Life" criteria, permitting a higher acceptable cost/QALY. We will target demonstrating ~£50k–£100k per QALY for SI-053 in the UK, which we believe is attainable and would make a positive NICE recommendation feasible. Several orphan cancer drugs have received NICE approval despite high prices by emphasizing unmet need and using commercial access agreements. We may consider an outcomes-based reimbursement scheme in some EU countries to further ease payer concerns (for example, partial refunds if the patient does not live X months post-treatment). France, Italy, and Spain also have provisions for orphan drugs (e.g. faster time to reimbursement, ability to get temporary authorization for use with pricing). While each will negotiate on price, our assumption is an EU list price roughly parity to US (\$75k ≈ €75k), but with net realized prices perhaps 10-20% lower after country-specific discounts. Importantly, EU payers have covered costly interventions in GBM before (e.g. Germany and others have centers offering Optune despite its expense), indicating willingness to pay for improvements in this

disease. SI-053's one-time administration and durable benefit will be a selling point in Europe's pharmacoeconomic evaluations.

In all major markets, reimbursement prospects for SI-053 are strong. Payers across the US and EU recognize glioblastoma as a devastating disease with scant therapeutic advances in decades. An effective new treatment with orphan designation will be met with *pressure from clinicians and patients to provide access*. By pricing SI-053 at ~\$75,000 – a level that reflects its value but is not egregious relative to other orphan therapies – we aim to achieve broad reimbursement with minimal hurdles. Our strategy includes proactive engagement with HTA agencies (e.g. scientific advice meetings with NICE/MHRA, early dialog with ICER, etc.) to fortify the pharmacoeconomic case. We will also highlight SI-053's synergies with existing care (surgery), potentially allowing cost offsets (e.g. if it reduces need for expensive second-line treatments or hospitalizations by delaying recurrence). These arguments, combined with orphan incentives (exclusivity, premium pricing allowances), should enable SI-053 to launch at or above \$75,000 per treatment and secure coverage in all key regions.

6. Financial Projections (2028–2040)

We have modeled SI-053 sales from launch (assumed 2028) through 2040 under two scenarios – **Base (Moderate)**, and **Optimistic** – based on different assumptions of clinical success, market penetration, and label scope. Key assumptions across all scenarios include the \$75,000 per patient price (global average, not accounting for discounts) and exclusivity until ~2038. We assume a **global rollout** by 2029 (US, EU, Japan, and other key markets).

6.1 Patient Uptake and Market Penetration: In the *Base Scenario*, we assume SI-053 achieves penetration of ~50% of eligible newly diagnosed GBM patients at peak (around 5 years post-launch). This assumes that roughly half of resected GBM patients will receive SI-053 as an add-on by say 2033. For the *Optimistic Scenario*, we assume up to ~80% penetration in GBM (becoming standard of care for resected tumors) and also some usage in brain metastasis surgeries or other malignant gliomas, effectively expanding the patient pool. The table below summarizes projected patient numbers and penetration:

- **Base:** ~50% of ~50k = ~25,000 patients/year at peak.
- **Optimistic:** ~80% of ~50k = ~40,000 patients/year for GBM, *plus* ~15,000 from other surgeries (tumors/metastases), totaling ~55,000/year.

These peaks would likely occur ~5–7 years post-launch (2034–2036).

6.2 Revenue Projections: Multiplying patients by price:

- **Base Case Revenue:** 25,000 pts * \$75k = **\$1.875 billion/year** peak (mid-2030s).
- **Optimistic Revenue:** 55,000 pts * \$75k = **\$4.125 billion/year** peak.

If patents hold until 2040, SI-053 might maintain sales for long, but for valuation we conservatively assume a tapering after exclusivity: e.g., a drop by ~50% over 2 years once generics enter, or a gradual decline if physicians start preferring newer modalities in the mid to late 2030s. We extend our projections to 2040, after which projections are too uncertain.

Profitability: As mentioned, **gross margins** are expected to be very high (>90%). There will be costs for manufacturing (which are low per unit), distribution, and post-marketing studies, but these are small relative to price. The main expenses will be marketing and sales (educating neurosurgeons, etc.) and ongoing administrative costs. In our valuation model, even in the pessimistic scenario SI-053 is profitable at the product level.

Risk-Adjustments: It is important to apply probability of success given the current stage (Phase I). The chance of ultimate approval for a drug at Phase I in oncology is typically around 10–15%. However, the risk here is mitigated by prior human use (Temodex in Belarus), and by the fact that the active drug (temozolomide) is known effective in GBM. The main risk is demonstrating sufficient incremental benefit on top of standard therapy. We might assign, for valuation, a **75% probability** of reaching market (given ODD and initial evidence) in the base case, to risk-adjust the NPV. In optimistic scenario (assuming stellar Phase II data), probability could effectively rise.

Net Present Value (NPV) Calculation: Discounting future cash flows back to 2025 (using a high discount rate for biotech, e.g. 15–20% to account for risk) yields estimated NPVs for SI-053 under each scenario:

- **Base Case NPV:** Approximately **\$2–3 billion**. This assumes moderate success, a solid Phase II result with a clear benefit that drives uptake to a \$1,875B peak. After risk-adjustment (75% probability to approval), the expected value might be around half of the nominal NPV. The upper end (if de-risked post-Phase II) could exceed this range in present value.
- **Optimistic NPV:** Could reach **\$4.5–7.2 billion**. If SI-053 truly becomes a new standard of care (with >9-month survival gain) and captures a large share including metastasis use, the sales could top \$4B/year for a few years, and even a heavily discounted cash flow would be in the multi-billions. For instance, \$4B for 10 years (undiscounted) is \$40B cumulative; even at 15% discount and say 75% chance success, the NPV might be at above range.

These valuations are sensitive to many assumptions (price, penetration, timelines). We note also that **orphan drug incentives (tax credits, grants)** could slightly improve net profitability, but recent changes in US law have reduced the orphan R&D tax credit to 25%. We have not explicitly added those benefits.

7. Acquisition vs. Licensing Scenario Analysis

We evaluate two strategic paths:

7.1 Acquisition Scenario: In this case, a larger pharmaceutical or biotech company outright acquires the SI-053 program to develop and commercialize it. An acquisition would typically occur after proof-of-concept data – for instance, positive Phase II results (around 2026–27) could trigger buyout interest. Based on comparable deals in the oncology/orphan space, we can estimate potential acquisition values:

- *Base Case:* Assuming SI-053 shows a clear benefit (e.g. significantly improves survival) and Phase II de-risks safety, a big pharma could value the program by a risk-adjusted DCF of future cash flows. As estimated, the risk-adjusted NPV might be ~\$2-3B. A reasonable **sale value could be in the range of \$1,5–2,5 billion**. For example, one might see a deal for ~\$1,5M upfront (to DBP shareholders) with perhaps additional earn-outs for hitting certain milestones (though in an acquisition, usually it's all upfront or upfront + CVR). Given GBM is a tough indication but with no competition, a low-single-digit billion buyout is plausible if Phase II data are compelling.
- *Optimistic/High Case:* If SI-053 demonstrates **breakthrough efficacy** (e.g. Phase II results show a dramatically higher 2-year survival or a >9-month OS gain) and becomes a likely new standard, multiple large companies could bid. In such a scenario, an acquisition price could exceed **\$4 billion**. It is not unheard of for late Phase II oncology assets with transformative potential to reach the low-to-mid-single-digit billions in value, especially with orphan status (for instance, CAR-T companies or others have seen such deals). A \$4-6B acquisition would reflect confidence that SI-053 will generate multi-billion cumulative sales over a decade.

From our perspective, an acquisition provides a clean exit. Big pharma would benefit from SI-053's orphan exclusivity and established temozolomide franchise (Temodar was a blockbuster; although generic now, this new formulation essentially rejuvenates it with IP/protection). A potential acquirer could be a company with existing neuro-oncology focus or hospital sales force.

7.2 Licensing/Partnership Scenario: Alternatively, we may license regional or global rights to SI-053 to a larger partner. In a licensing deal, DBP could receive an upfront payment, milestone payments upon clinical and regulatory successes, and royalties on future sales. Based on industry benchmarks for a Phase II-stage oncology asset with orphan status:

- **Upfront Payment:** Likely on the order of **\$150–400 million** in a base scenario. For example, a partner might pay ~\$200M upfront to secure exclusive rights (this helps DBP fund Phase II). In an optimistic case (very strong Phase II data or multiple interested partners), upfront could reach \$400M+.

- **Milestone Payments:** These are typically structured for developmental, regulatory, and commercial milestones. For SI-053, milestones could include: payment for starting/completing Phase II, payment for EU approval, US approval, maybe Japan approval, and sales milestones at certain revenue thresholds. In total, **regulatory milestones** might sum to **\$200M–400M** across major markets, and **sales milestones** could add another \$500M–1B if the product hits certain sales (\$500M, \$1B, etc.). Thus, the total deal “bio-dollars” (upfront + all milestones) could be on the order of **\$850M–1.8B** in a strong scenario. (For instance: \$300M upfront + \$150M on Phase II start + \$200M on NDA filing + \$300M on approvals + \$850M for hitting sales goals, etc.).
- **Royalty Rate:** Royalties for orphan drugs are often in the mid-teens to low-twenties percentage of sales, depending on the stage of the asset and negotiating leverage. Since DBP has done the early work and the product is differentiated, they might secure a **high teens royalty (18–22%)** on net sales in an optimistic case. We will assume ~15–18% in base case. This means if SI-053 reaches \$1,875B peak sales, DBP would get ~\$300M per year in royalties at 15%. Royalty income could thus be very significant long-term, allowing DBP (or its investors) to participate in the upside.
- **Territory Splits:** It’s possible DBP could license European rights to one partner and US rights to another, etc., but for simplicity we consider a **global license**. A global deal might have the structure above. Alternatively, DBP might out-license one region and try to self-commercialize in another (though that seems unlikely given the scale needed).

Comparison: In a successful outcome, a licensing deal could actually yield more total value to DBP than an outright sale (because of the retained royalties). For example, in the optimistic scenario if sales reach \$4,125B/year, a 20% royalty is \$825M/year to DBP, which over a decade could be >\$1B just in royalties, plus the upfront/milestones. An acquisition is cleaner and guarantees the return upfront (albeit usually at a discounted value relative to the total potential).

For DBP, licensing can be a way to fund development (the upfront can pay for Phase II) while keeping some upside. DBP has signaled interest in partnerships – as in the **asset purchase and collaboration agreement with a partner (Vivo BioPharma)** in 2023 related to SI-053.

In summary, we project that under a **Base/Mid scenario**, DBP could license SI-053 for roughly **\$150M upfront, \$500M+ in milestones, and ~15–18% royalties**. Under an **Optimistic scenario**, a partnership could be worth \$400M+ upfront and up to \$1B in milestones with ~20% royalties.

Finally, we consider **orphan market protections** in deal-making: because SI-053 has orphan exclusivity, a partner or acquirer knows they effectively have a protected market for

a fixed time (7–10 years). This is a strong incentive – it reduces the threat of generic competition quickly eroding sales.

8. Orphan Drug Market Access and Exclusivity Benefits

As noted, the **Orphan Drug Designation (ODD)** is a key asset:

- In the **EU**, ODD grants **10 years of market exclusivity** from approval. This means no other “similar” medicinal product can be approved for GBM if SI-053 is on the market, unless SI-053 cannot meet patients’ needs. This protection is separate from patents, effectively functioning like a regulatory monopoly. It also often comes with pricing and reimbursement advantages – many EU countries have special pathways for orphan drugs, and payers recognize the limited patient population. SI-053’s orphan status will help it obtain premium pricing and secure reimbursement since it addresses a fatal disease with limited options. Additionally, in Europe the orphan exclusivity can be extended by 2 extra years (to 12 total) if the drug also gets a pediatric indication approval. DBP could consider trials in pediatric high-grade gliomas (though rare) to make use of this extension.
- In the **United States**, ODD provides **7 years of market exclusivity** under the Orphan Drug Act. This is slightly shorter, but still substantial. There have been legislative discussions about possibly extending orphan exclusivity for certain diseases, but currently it remains 7 years (though if a drug also has new patents or is biologic it could have other exclusivities). For SI-053, being a formulation of a generic drug, the orphan exclusivity will likely be the main barrier to generic entry in the US until 7 years post-approval. During this period, FDA will not approve any generic or similar temozolomide gel for GBM. The company also benefits from waived FDA fees (saving ~\$3 million in application fees) and could access the orphan drug tax credit for trial costs (currently 25% credit in the US).
- Orphan designation in both regions also signals to investors and partners that the regulators acknowledge the rarity and need – it’s a form of validation. DBP received EMA ODD for SI-053 back in 2016, very early, which allowed a streamlined development.
- **Exclusivity vs Patent:** Combining orphan exclusivity with patents means SI-053 can be well-protected. For example, even after US orphan exclusivity expires (~2035 if approved in 2028), DBP’s formulation patents (if granted into late 2030s) could prevent direct copying. Conversely, if patents expire earlier in the EU (say 2036) but orphan exclusivity runs to 2038, that adds two extra years of market protection. Essentially, one can expect **no generic competition until 2036–2038** at the earliest, and possibly not until 2040 if new patents are secured. This market exclusivity is a pillar of the financial forecast – it gives a relatively long runway (~10+ years) to capitalize on the investment.

- **Market Access:** Orphan drugs often enjoy facilitated market access. Payers might be more willing to cover SI-053 given GBM's lethality and the lack of alternatives that substantially prolong survival. Furthermore, if SI-053 can show not just longer survival but possibly improved quality of life (e.g. reduced need for toxic IV chemo, fewer systemic side effects), that can be part of the health economics case. Some EU countries have special funding or higher price tolerance for orphan oncology drugs. In the US, Medicare and private insurers usually cover FDA-approved orphan cancer drugs, though outcomes-based pricing could emerge. We anticipate SI-053's cost-effectiveness will be favorable compared to TTFields – for example, if SI-053 adds (say) 0.75 quality-adjusted life year (QALY) at \$75k cost, that's \$100k/QALY, which is within acceptable range in the US and some EU systems, whereas TTFields has been criticized for ~\$500k/QALY in some analyses due to its cost. Thus, SI-053 could actually save healthcare costs by reducing need for other treatments (and potentially reducing steroid use or other hospitalizations if it controls the tumor locally).

In summary, the orphan drug designations greatly enhance SI-053's value by ensuring **exclusivity (monopoly pricing power) into the mid/late 2030s** and smoothing the path for approval and reimbursement. These benefits have been factored into our valuation scenarios and are a compelling aspect for any partner or acquirer.

9. Conclusion

SI-053 represents a promising advancement in the treatment of glioblastoma, an area of great medical need. By enhancing local drug delivery, it offers a way to extend patient survival beyond what is achievable with current standard therapy, without adding undue systemic toxicity. In economic terms, SI-053 could command a substantial share of the GBM therapy market given its compelling clinical rationale and orphan drug protections. Our valuation analysis indicates that SI-053 is potentially a **high-value asset**: even under conservative assumptions it justifies the development costs, and under favorable scenarios it could achieve **blockbuster status** in a rare disease context.

For Double Bond Pharmaceutical and its stakeholders, the strategic decision will revolve around how to realize this value – whether through a lucrative partnership, an outright sale to a larger player, or by progressing further in-house to increase the asset's value. Orphan drug market exclusivity (10 years EU, 7 years US) provides a strong runway for the eventual commercial partner to recoup their investment and profit, which will be a key selling point in negotiations. Additionally, low manufacturing costs mean high margins, improving the pharmacoeconomic appeal.

By extending projections to 2040, we see that SI-053's impact could be felt well into the next decade, especially if patent strategies succeed in extending exclusivity. After 2040, we assume either generic versions of local temozolomide gels or next-generation therapies

may emerge, but SI-053 could by then have established itself as a standard adjunct for a generation of patients, and possibly spun off improvements (new formulations or combination regimens) under new patents.

In summary, SI-053's valuation is underpinned by:

- **Robust Survival Benefit (Clinical Value):** early data suggests a ~9 month OS improvement, which if confirmed would significantly improve patient outcomes. Even a more modest but clear benefit would justify its use given GBM's severity.
- **Orphan Market Exclusivity:** Guaranteed **monopoly period** (7–10 years) post-launch in major markets, allowing pricing freedom and market penetration without generic competition.
- **Addressable Market Size:** While GBM is rare, the addressable patients in US/EU and worldwide yield a multi-hundred-million dollar annual opportunity, expandable further with brain metastasis indications (tens of thousands more patients).
- **Competitive Advantage:** Few competitors in local therapy; compares favorably to Gliadel (more efficacy) and TTFields (cheaper and more convenient) – positioning SI-053 as a likely add-on to *all* resected GBM cases, not just niche use.
- **Financial Upside in Deals:** A well-negotiated partnership could bring in substantial non-dilutive capital (hundreds of millions upfront) to DBP and share the risk, whereas an acquisition could reward investors immediately. Both paths are viable given interest in novel GBM treatments.

As Phase I/II results come over 2025–2026 and safety is confirmed and even preliminary efficacy signals emerge (e.g. no early recurrences in treated cavities, good drug distribution), confidence in SI-053 will grow. By quantifying the market and outlining best/base-case scenarios, this report highlights that SI-053 could be a **significant value driver** with the potential to both improve patient lives and deliver strong returns on investment.

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