WPD Pharmaceuticals

# Beyond Glioblastoma

June 2025

# Facts & Market

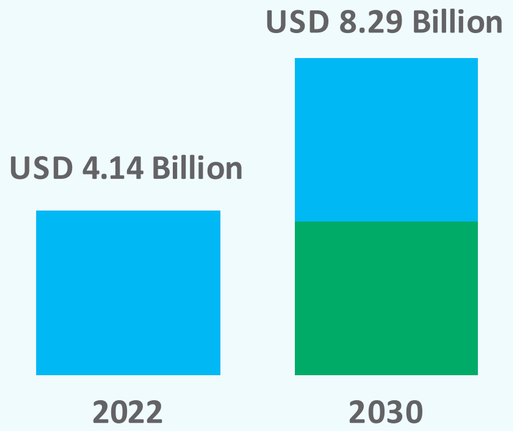
WPD Pharmaceuticals is executing a uniquely de-risked and capital-efficient development strategy for WPD401, a promising targeted therapy for glioblastoma and other hard-to-treat tumors.

Through a dual agreement structure—a global, exclusive license and a research collaboration—with Wake Forest University and the lab of Prof. Waldemar Debinski, a pioneer in brain tumor therapeutics, WPD is not only securing exclusive commercial rights but also co-developing the asset through non-dilutive funding mechanisms.

Glioblastoma, one of the most aggressive and heterogeneous cancers, serves as a strategic Phase 0 study for WPD401 in other cancers. This intentional choice enables WPD to accelerate the path to clinic for broader oncology indications, positioning glioblastoma as a fast-track model to gather human safety and preliminary efficacy data.

## Global Glioma Treatment market

**Market forecast to grow at a CARG of 9.1%**




https://www.researchandmarkets.com/reports/5892901

RESEARCH AND MARKETS
THE WORLD'S LARGEST MARKET RESEARCH STORE



WPD Pharmaceuticals

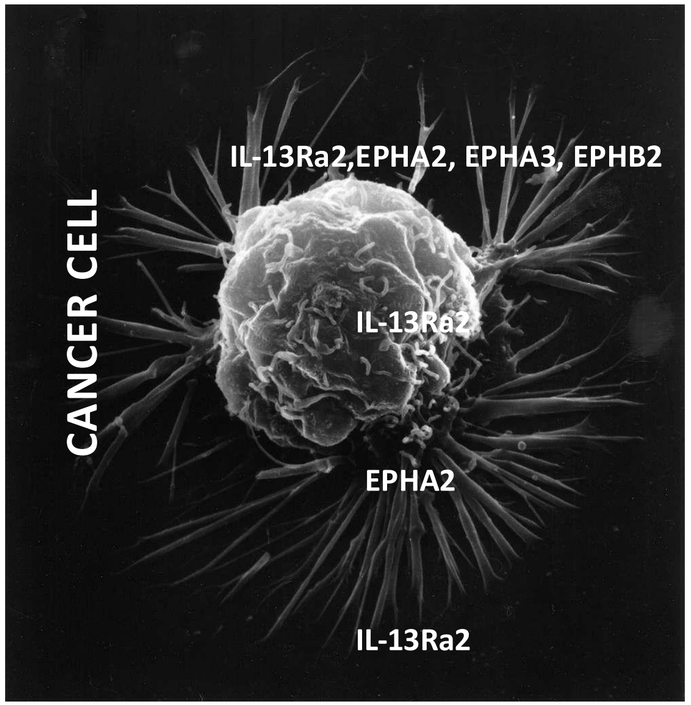
# Glioblastoma Facts & Market



| YEAR / PARTIES | CLINICAL PHASE | DEAL TYPE | DRUG / INDICATION | UPFRONT | MILESTONES | ROYALTIES |
|---|---|---|---|---|---|---|
| 2024 (DAY ONE → IPSEN) | PHASE II COMPLETE; FDA APPROVED | EXCLUSIVE LICENSE (EX-USA) | TOVORAFENIB (PLGG) | $111M | UP TO $350M | TIERED, DOUBLE-DIGIT |
| 2021 (AGIOS → SERVIER) | PHASE III STARTED | ONCOLOGY DIVISION ACQUISITION | VORASIDENIB | $1.8B | $200M | YES (UNDISCLOSED %) |
| 2021 (ONCOCEUTICS → CHIMERIX) | PHASE III | COMPANY ACQUISITION | ONC201 / DORDAVIPRONE | $78M | UP TO $360M | YES (UNDISCLOSED %) |
| 2019 (MIMIVAX → FOSUN, CHINA) | PH II USA / PH I CHINA | REGIONAL LICENSE (CHINA) | SURVAXM | $10M | $138M | N/D (~10–15%) |
| 2016 (GENENTECH → KAZIA) | PH I COMPLETE; PH II PLANNED | GLOBAL EXCLUSIVE LICENSE | PAXALISIB | $5M | N/D | STANDARD TERMS |
| 2021 (KAZIA → SIMCERE, CHINA) | PHASE II COMPLETE | REGIONAL LICENSE (CHINA) | PAXALISIB | $11M | UP TO $281M | MID-TEENS (~15%) |
| 2021 (LINEAGE → IMMUNOMIC) | PHASE I STARTED | GLOBAL LICENSE + CO-DEV | VAC2 IMMUNOTHERAPY | $2M | UP TO $67M | UP TO 10% |
| 2025 (ClearPoint Neuro, Inc. and Oberland Capital Management) | MULTIPLE PH I | INVESTMENT | Brain Drug Delivery Device | $30M | UP TO $75M | NA |

# Solution: antibody –like conjugates – 4 Targets : IL-13Ra2,EPHA2, EPHA3, EPHB2

## Technology validated in dogs with spontaneous malignant gliomas




| Targeting ligand | Main part | | Cytotoxic Agent | |
|---|---|---|---|---|
| Modified IL-13 | Antibody part | Modified EFNA5 | DM1 as in Kadcyla®, | WPD401 |
| Modified IL-13 | Modified Diphtheria toxin | | | WPD101a |
| Modified EFNA1 | Linker | Modified Pseudomonas exotoxin A | | WPD101b |
| Modified IL-13 | Linker | Not disclosed | Not disclosed | WPD103 |



WPD Pharmaceuticals

# The Phase I clinical trial in dogs with spontaneous malignant gliomas

The study involved 17 dogs diagnosed with glioma and positively tested for IL-13Ra2 (17/17) or/and EPHA2 (11/17) receptors. The dogs received treatment with increasing doses of IL-13- and ephrin-A1-based cytotoxins delivered through the convention-enhanced (CED) method, ensuring consistent intratumoral delivery of the cocktail. The median coverage of the tumor was 70% (ranging from 40-94%), and no dose-limiting toxicities were observed. After 42 days of treatment, 15 out of 16 dogs showed a reduction in tumor size, with a median reduction of 42% (ranging from 5-94%). Objective tumor responses were observed in 8 out of 16 (50%) dogs, with a median tumor volume reduction of 79% (ranging from 65-94% of tumor volume regression).

**The authors concluded that the CED of IL-13RA2/EPHA2 targeting cytotoxins at concentrations ranging from 0.05-1.6 ug/mL was safe and resulted in clinically relevant responses in 50% of dogs with gliomas, highlighting the practical implications of the study.**

JOURNAL ARTICLE

**Phase I trial of convection-enhanced delivery of IL13RA2 and EPHA2 receptor targeted cytotoxins in dogs with spontaneous intracranial gliomas**

John H Rossmeisl, Denise Herpai, Mindy Quigley, Thomas E Cecere, John L Robertson, Ralph B D'Agostino, Jonathan Hinckley, Stephen B Tatter, Peter J Dickinson, Waldemar Debinski

*Neuro-Oncology*, Volume 23, Issue 3, March 2021, Pages 422–434, https://doi.org/10.1093/neuonc/noaa196

Published: 19 August 2020

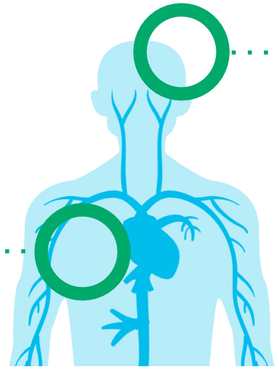
Rossmeisl JH, Herpai D, Quigley M, Cecere TE, Robertson JL, D'Agostino RB, Hinckley J, Tatter SB, Dickinson PJ, Debinski W. Phase I trial of convection-enhanced delivery of IL13RA2 and EPHA2 receptor targeted cytotoxins in dogs with spontaneous intracranial gliomas. Neuro Oncol. 2021 Mar 25;23(3):422-434. doi: 10.1093/neuonc/noaa196. PMID: 32812637; PMCID: PMC7992889. (https://pubmed.ncbi.nlm.nih.gov/32812637/)



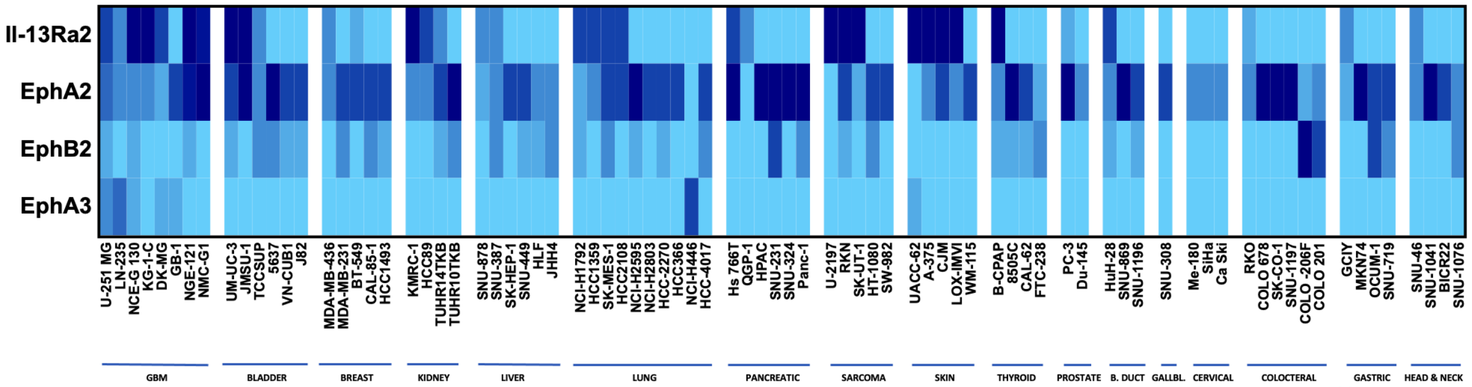
WPD Pharmaceuticals

# WPD401/101a potential therapeutic options

Intravenous infusion



Convection Enhanced Delivery (CED)




*Potential molecular targets for WPD-401 in various types of cancer, based on Human Protein Atlas*

,

JOURNAL ARTICLE

**Phase I trial of convection-enhanced delivery of IL13RA2 and EPHA2 receptor targeted cytotoxins in dogs with spontaneous intracranial gliomas**

John H Rossmeisl, Denise Herpai, Mindy Quigley, Thomas E Cecere, John L Robertson, Ralph B D'Agostino, Jonathan Hinckley, Stephen B Tatter, Peter J Dickinson, Waldemar Debinski

*Neuro-Oncology*, Volume 23, Issue 3, March 2021, Pages 422–434, https://doi.org/10.1093/neuonc/noaa196

Published: 19 August 2020

*Please note that the first medicinal product delivered by CED (UPSTAZA) was approved by EMA/MHRA before the FDA.

# Timeline 2025-2026

## WPD Activities Glioblastoma

WAKE FOREST UNIVERSITY

| Q2 2025 | Q3 2025 | Q3 2025 | Q4 2025 | Q1 2026 | Q2 2026 | Q3 2026 | Q4 2026 |
|---|---|---|---|---|---|---|---|
| Non GMP manufacuring finised !! | GMP manufacturing | GLP animal study- mice & dogs – dog study finised !! | Clinical trial using QUAD-DM1 (GMP) – cohort 1&2) | Clinical trial using QUAD-DM1 (GMP) – cohort 3&4 | Clinical trial using QUAD-DM1 (GMP) – cohort 5 | Follow-up (funded) | Phase I/II CTA |

**Recent financing rounds** were supported primarily through **non-dilutive grant funding** and **a bridge round backed by a medtech VC partner**.

## WPD Activities Other Cancers

| Q1 2025 | Q2 2025 | Q3 2025 | Q4 2025 | Q1 2026 | Q2 2026 | Q3 2026 | Q4 2026 |
|---|---|---|---|---|---|---|---|
| Study of QUAD Protein Expression Kinetics - finised !! | Initiation of Production in CHO System finised !! | In Vitro Tests in tumors | In Vitro Tests in tumors | Completion of Analytical Development | Initiation of Production in CHO System (GMP) | High scale manufacturing | Phase I CTA |

WPD Pharmaceuticals

Mariusz Olejniczak, CEO

mariusz.olejniczak@wpdpharmaceuticals.com

0048515262381