

# A Phase 1b/2 Study on the Efficacy and Safety of BXQ-350

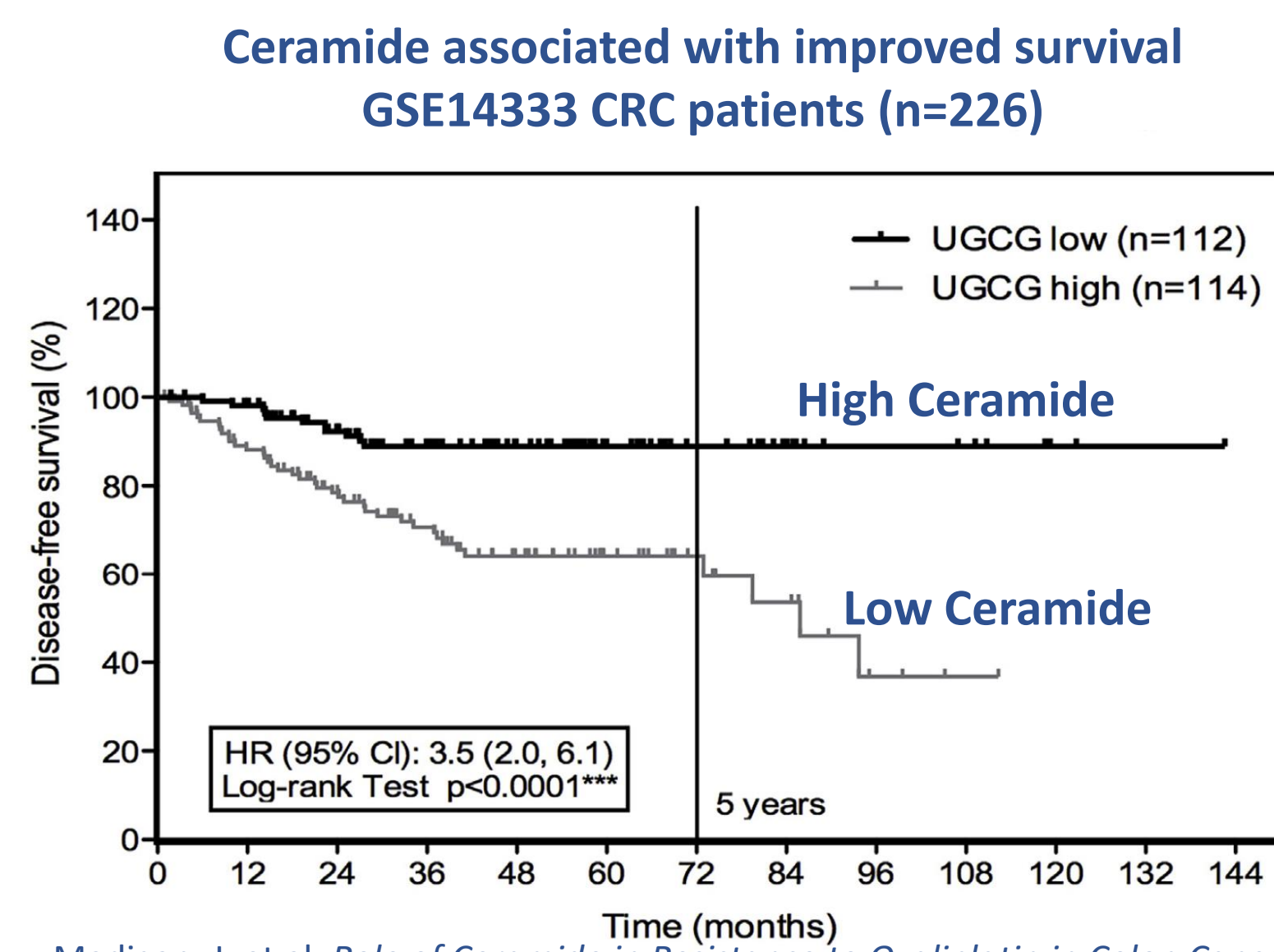
ASCO GI 2025

## in Combination with mFOLFOX7 and Bevacizumab in Newly Diagnosed Metastatic Colorectal Cancer (mCRC) Patients

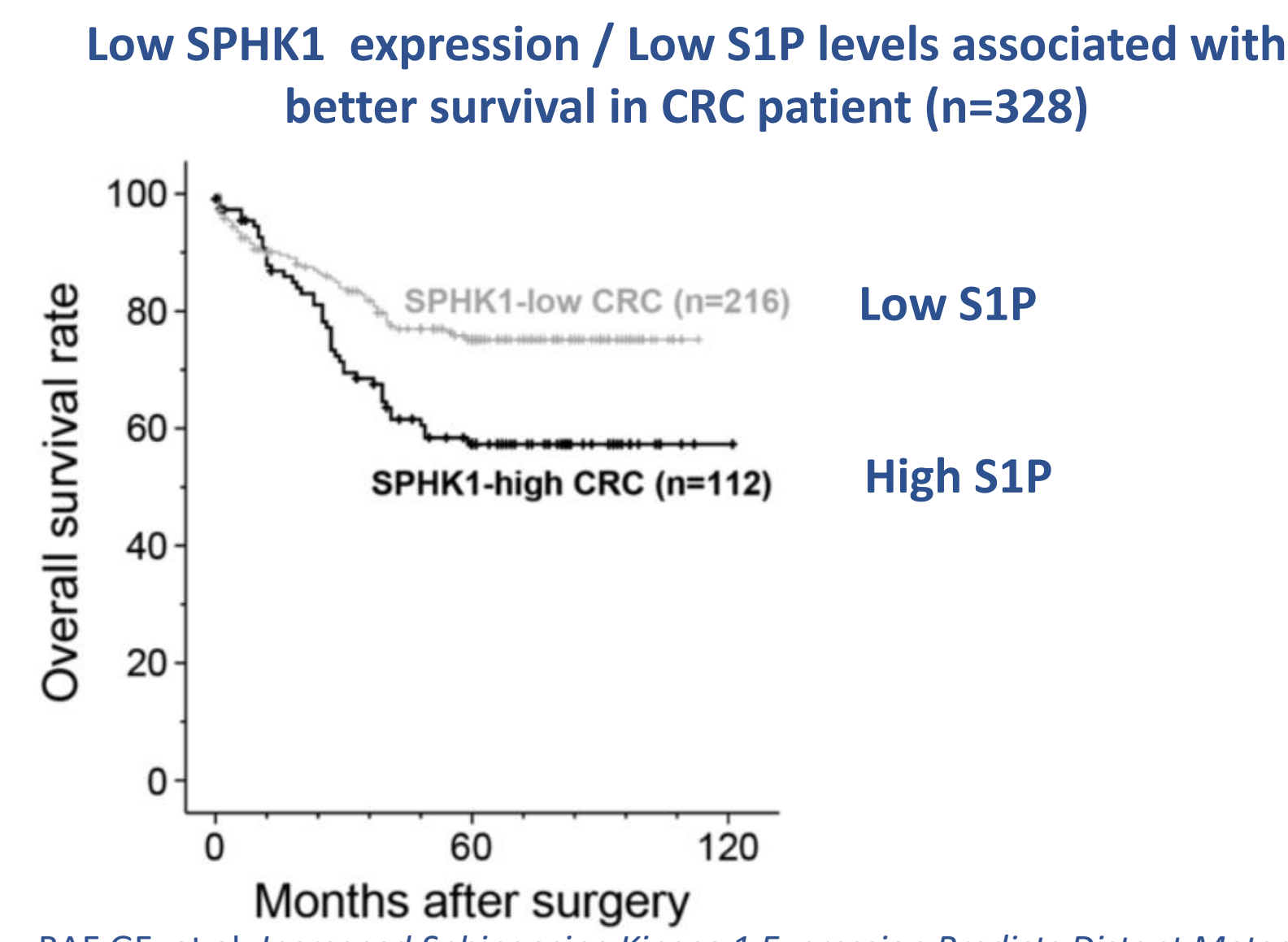
D. Flora<sup>1</sup>, R. Patel<sup>2</sup>, F. Lee<sup>3</sup>, A. Pimentel<sup>4</sup>, J. Gemmill<sup>5</sup>, D. Sohal<sup>6</sup>, V. Sharma<sup>7</sup>, S. Sharif<sup>8</sup>, N. Gabrail<sup>9</sup>, R. Curry III<sup>10</sup>, G. Tapolsky<sup>11</sup>, R. Takigiku<sup>11</sup>, J. Beach<sup>11</sup>, M. Gazda<sup>11</sup>, T. Arshad<sup>11</sup>

### 1. Background:

- **Sphingolipids are key signaling molecules in cancer**
- **Ceramides:** Pro-apoptotic; enhance anti-tumoral immunity
- **S1P:** Promotes tumor growth and pro-tumoral immunity
- **Elevated ceramide or low S1P levels are linked to better survival and prognosis in CRC patients**



Madigan, J. et al. *Role of Ceramide in Resistance to Oxaliplatin in Colon Cancer.* Exp Cell Res, 2020, March 15, 388.



BAE GE. et al. *Increased Sphingosine Kinase 1 Expression Predicts Distant Metastasis and Poor Outcome in Patients with Colorectal Cancer.* Anti Cancer Research, 2019, 39:663-670.

### Summary

- **BXQ-350 is a novel biologic** and nanovesicle formulation of Saposin C, an allosteric activator of enzymes involved in sphingolipid metabolism
- BXQ-350 modulates sphingolipid metabolism, **lowering S1P and increasing ceramide levels**
- BXQ-350 is **well-tolerated and showed signs of single agent activity** across 20 refractory solid tumors types in a **Phase 1 study of 87 patients**
- **Potential biomarkers** based on S1P & ceramide, cytokines, PBMCs, ctDNA, NfLs
- **BXQ-350 may prevent or resolve CIPN**
- **DSMB review of safety data approved continuation**

### Other Studies:

**BXQ-350** is currently being investigated in:

- PoC and PK/PD study in cancer patients with established CIPN (NCT05291286)
- Phase 1 study in combination with radiation in pediatric DIPG/Diffuse Midline Glioma patients (NCT04771897)

St Elizabeth Healthcare, Edgewood, KY<sup>1</sup> The University of Kentucky, Lexington, KY<sup>2</sup> University of California, Irvine, CA<sup>3</sup> University of Miami, Miami, FL<sup>4</sup> Stony Brook University Hospital, New York, NY<sup>5</sup> University of Cincinnati, Cincinnati, OH<sup>6</sup> University of Louisville, Louisville, KY<sup>7</sup> University of Iowa, Iowa City, IA<sup>8</sup> Gabrail Cancer Center, Canton, OH<sup>9</sup> CTI, Covington, KY<sup>10</sup> Bexion Pharmaceuticals, Covington, KY<sup>11</sup>

**Acknowledgement:** Patients who participated in the trials and their families, clinicians and staff at investigational sites, Bexion's personnel

### 4. BXQ-350 + mFOLFOX7 & Bevacizumab study design:

**Phase 1b/2 study in combination with mFOLFOX7 and Bevacizumab in newly diagnosed mCRC patients**

- **Phase 1b/2:**
  - Safety dose escalation to establish RP2D. Patients started at 1.8 mg/kg BXQ-350 in combination with mFOLFOX7 and Bevacizumab; No MTD, BXQ-350 increased to 2.4 mg/kg which is now the RP2D.
  - 30 patient expansion cohort at the RP2D

**Primary objectives Phase 1b/2:**

- Select **RP2D** (safety profile, DLTs)
- **Preliminary efficacy** of the combination based on **ORR (Overall Response Rate), COD (Cumulative Oxaliplatin Dose)**

**Secondary objectives Phase 1b/2:**

- Overall safety and tolerability of combination
- Efficacy of BXQ-350 + mFOLFOX7 & Bevacizumab based on **DCR (Disease Control Rate), OS (Overall Survival), PFS (Progression Free Survival)**

- **Assess whether BXQ-350 decreases development, intensity or duration of CIPN** based on neuropathy scores from EORTC questionnaires (QLQ-C30 and CIPN20)

**Exploratory objectives Phase 1b/2:**

- Potential correlation of PD biomarkers with response
- Immuno & sphingolipid profiling
- Neurofilament light chain (NfL) to monitor CIPN
- ctDNA analysis

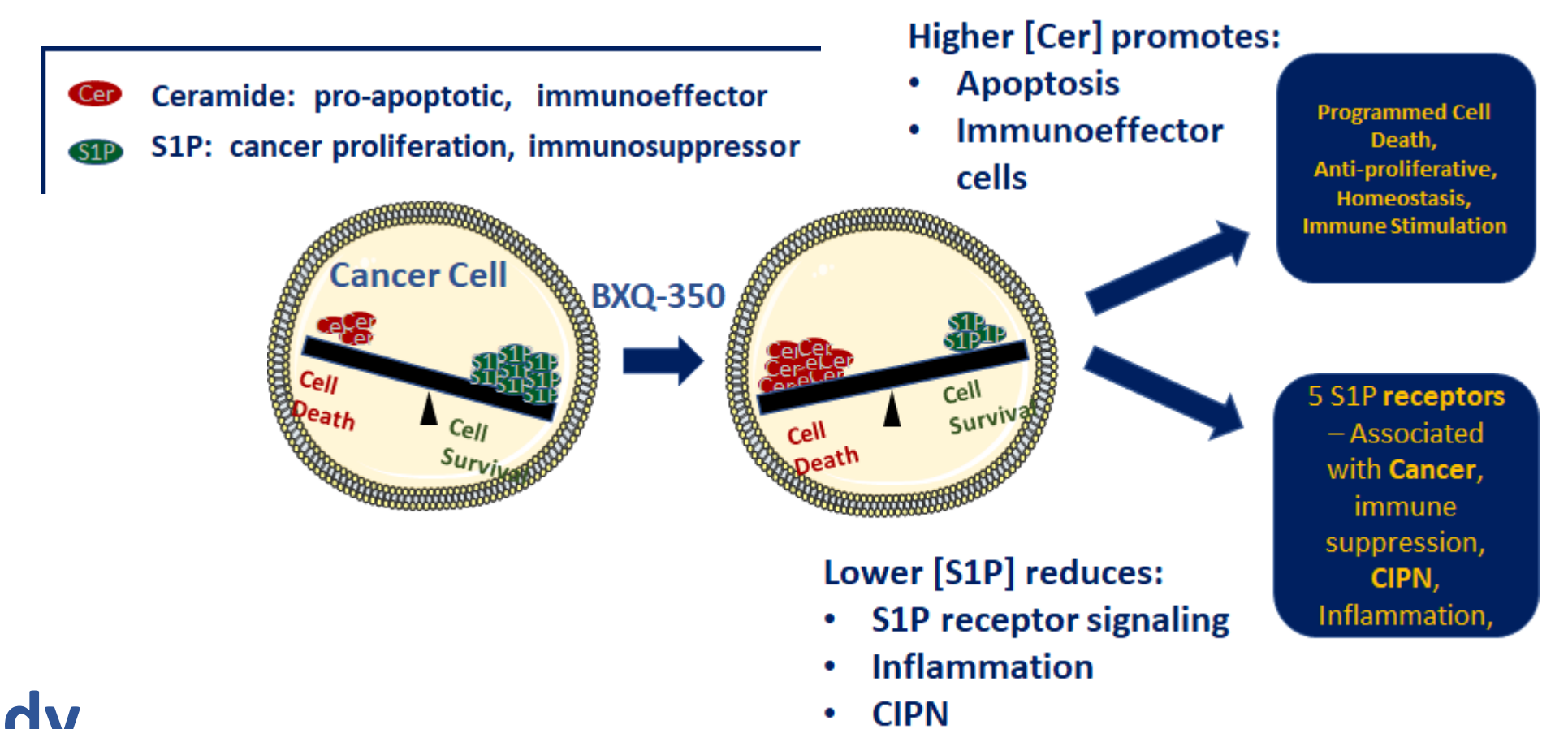
**Current Status:**

- 3 patients enrolled at 1.8 mg/kg and 30 patients enrolled at 2.4 mg/kg
- DSMB reviewed the available safety data and approved continuation of enrollment
- Currently available safety data of the combination of mFOLFOX7 + Bevacizumab with BXQ-350 consistent with historical safety data for mFOLFOX7 + Bevacizumab

**For further details, please contact tarshad@bexionpharma.com**

### 2. BXQ-350 is a nanovesicle formulation of Saposin C, an allosteric activator of sphingolipid metabolism

- normalizes dysregulated sphingolipid metabolism, lowering S1P and increasing ceramides levels



### 3. BXQ-350 was investigated in a Phase 1 study with recurrent solid malignancies (NCT02859857)

- BXQ-350 was **safe and well-tolerated**
- **17.8% Clinical Benefit Rate (PR, SD)** observed at Cycle 6 across tumor types including CRC, appendiceal, pancreatic and rectal cancers
- **One patient self-reported improvement of pre-existing CIPN symptoms** soon after BXQ-350 administration

