A SINGLE IV DOSE OF PLINABULIN INDUCES SUSTAINED MOBILIZATION OF CD34+ CELLS IN HUMANS THROUGH A MECHANISM OF ACTION INDEPENDENT FROM G-CSF OR CXCR4 AND WITHOUT CAUSING BONE PAIN OR THROMBOCYTOPENIA

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G-CSF

- Bone Marrow Derived **CD34+** Progenitor Stem Cells are Frequently Mobilized from the Bone Marrow and Used for Stem Cell Applications such as for Regenerative Medicine.
- **G-CSF** is Highly Effective to Prevent Chemotherapy-Induced-Neutropenia **(CIN)**
- Short-Acting **G-CSF** is Indicated to Mobilize Hematopoietic CD34+ Progenitor Stem cells into the Peripheral Blood for Collection by Leukapheresis.

G-CSF has the following Disadvantages:

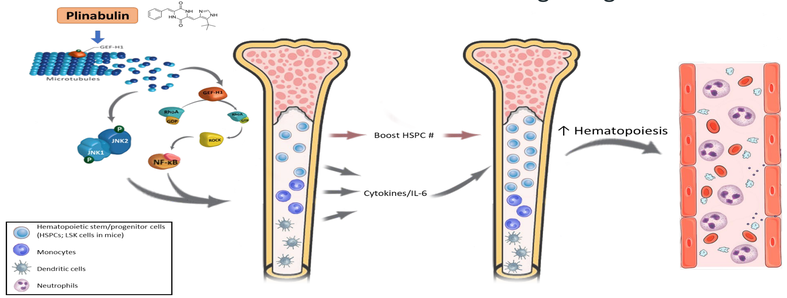
1. Frequent (6 to 7) Doses are Needed
2. G-CSF Causes Bone Pain in Most Patients
3. G-CSF can cause Thrombocytopenia as per product label
4. G-CSF Causes Rare but Serious Side Effects, (Fatal Splenic Rupture and Acquired Respiratory Distress Syndromes (ARDS)

PLINABULIN

- A novel, small molecule Immune-Enhancing Agent, given as a single IV dose (as a 30-minute infusion) is equally effective as Neulasta (long-acting G-CSF) for the prevention of CIN.

MoA - Plinabulin - First-in-Class Agent with GEF-H1 as a Novel Target

- Plinabulin has a differentiated mechanism of action (MoA) than G-CSF
  - Plinabulin induces:
    - Neutrophil demargination and reduced neutrophil transit time from the bone marrow that is consistent with IL-6 signaling.



PLINABULIN :

A Potent Mobilizer of Bone Marrow-Derived CD34+ Progenitor Stem Cells

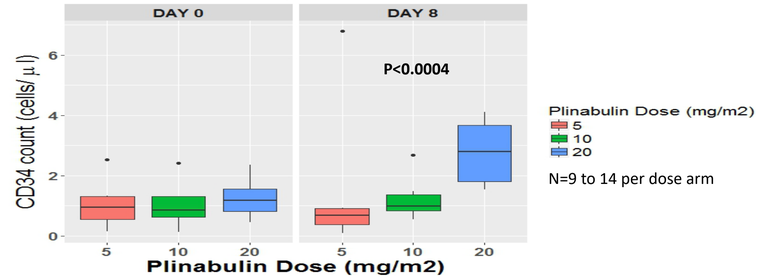
- **Novel**
- **Small-Molecule**
- **Only One Single Dose Needed**
- **Independent from the G-CSF Pathway**
- **Independent from the CXCR4 Pathway**

ADVANTAGES of PLINABULIN vs G-CSF :

- **Plinabulin is Given as a Single 40 mg Fixed Dose (=20 mg/m2) as a 30-minute IV infusion**
- **Plinabulin Does not Cause Bone Pain**
- **Plinabulin does not cause Thrombocytopenia**
- **Patient Exposure Date from > 500 Patients Showed Favorable Safety/Tolerability Profile**
- **Plinabulin can be Combined with Pegfilgrastim (G-CSF)**

BeyondSpring PHARMACEUTICALS

Plinabulin Monotherapy is Highly Effective for CD34+ Mobilization

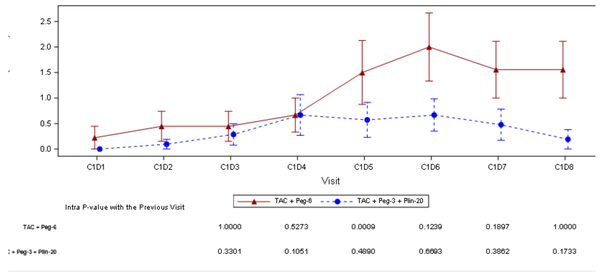


Plinabulin (Plin) in Combination with Low Dose Pegfilgrastim (Peg) is at least as, or more Effective for CD34+ Mobilization as Full Dose Peg, but with Less Bone Pain than Peg

CD34+ Counts	Baseline	Day 6 Post dose	Day 8	Day 21
Peg 6mg (n=7)	1.90±3.26*	0.22±0.19*	6.56±12.2*	3.14±2.23*
Low dose Peg/Plin (n=9)	1.44±1.69	0.22±0.21	2.28±1.47	6.45±5.51**

*Not significantly different between Peg 6mg and low dose Peg/Plin groups (P=NS). Peg Day 8 CD34+ count had one high outlier (count of 33)
**p=0.027 for D21 vs Baseline in low dose Peg/Plin group

Adding Plinabulin to Pegfilgrastim Eliminated Pegfilgrastim-Induced Bone Pain (Assessed by PRO-Questionnaire)



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