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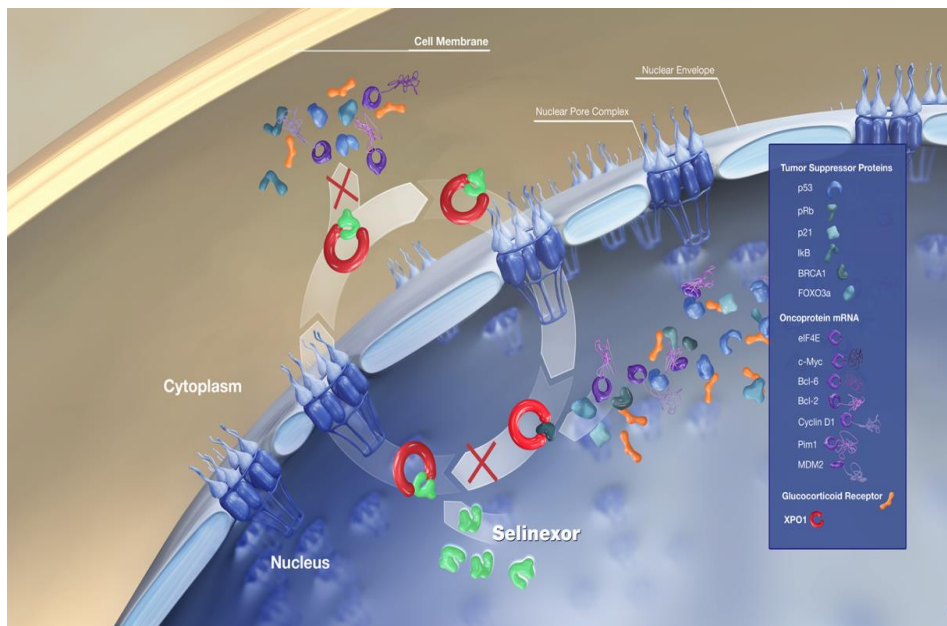
Helping hematologists conquer blood diseases worldwide

Selinexor, Lenalidomide and Dexamethasone (SRd) for Patients with Relapsed/Refractory and Newly Diagnosed Multiple Myeloma

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Selinexor: First-in-Class, Oral Selective Inhibitor of Nuclear Export and Reactivates Tumor Suppressor Proteins



Exportin 1 (XPO1) is a critical nuclear exporter for tumor suppressor proteins (TSPs, e.g., p53, IκB, and FOXO3a)¹⁻³ and eIF4E-bound oncoprotein mRNAs (e.g., c-Myc, Bcl-xL, MDM2, cyclin D1)^{1,2,4}

XPO1 is overexpressed in MM:

- High **XPO1** levels enable cancer cells to escape TSP-mediated cell cycle arrest and apoptosis^{1,2,5}
- **XPO1** levels correlate with poor prognosis and drug resistance^{1,2}

Selinexor is an oral selective **XPO1** inhibitor; preclinical data demonstrates that selinexor:

- Reactivates multiple TSPs relevant to MM, inhibits NF-κB and c-Myc activity, and reactivates GR signaling in presence of dexamethasone^{1,2,6,7}

¹Tai et al., *Leukemia*, 2014, ²Fung HY, Chook YM. *Semin Cancer Biol.* 2014, ³Parikh et al., *J Hematol Oncol.* 2014, ⁴Gravina GL, et al., *BMC Cancer.* 2015, ⁵Schmidt et al., *Leukemia*, 2013, ⁶Parikh et al., *J Hematol Oncol.* 2014, ⁷Argueta et al., *Oncotarget*, 2018



Background / Rationale:

Selinexor and Lenalidomide Activity in RRMM

- In the **STORM trial selinexor + dexamethasone** were given to patients with MM refractory to at least one proteasome inhibitor, one immunomodulatory agents, and daratumumab (triple-class refractory) resulting in **25.3% ORR and 3.7 months of PFS¹**
- Per STORM trial results, selinexor (+ dexamethasone) received accelerated approval from the FDA for patients with RRMM²
- The **selinexor, bortezomib and dexamethasone (SVd) all QW regimen** showed **superior PFS (13.93 months vs. 9.46 months) and ORR (76.4% vs. 62.3%) with reduced peripheral neuropathy** compared with standard BIW bortezomib + dexamethasone³
- Selinexor demonstrated synergistic activity in combination with lenalidomide *in vivo*⁴
- In the MM-009 trial lenalidomide + dexamethasone were given to lenalidomide-naïve patients with ≥ 1 prior MM therapy, resulting in 61% ORR and 11.1 months of PFS⁵

PFS=progression-free survival, IMiD=immunomodulatory agent, MM=multiple myeloma, ORR=overall response rate, PI=proteasome inhibitor, QD=once daily, QW=once weekly, RRMM=relapsed/refractory multiple myeloma

¹Chari et al., *NEJM* 2019, 381:8; ²XPOVIOTM (selinexor). Prescribing information. Reference ID:4457635—US FDA;

³Grosicki, et al. *Lancet* 2020 ⁴Carlson et al., *ESH* 2014; ⁵Weber et al., *New England Journal of Medicine*, 2007.



STOMP Study with Selinexor + Lenalidomide + Dexamethasone (SRd) Selinexor and Backbone Treatments Of Multiple Myeloma

Object:

- Primary endpoint: maximum tolerated dose (MTD), recommended phase 2 dose (RP2D), and overall response rate (ORR)
- Secondary endpoint: Safety per CTCAE and progression free survival (PFS)

Key Inclusion/Exclusion criteria:

- Age \geq 18 y.o.
- WBC \geq 1,500/mm³ Hb \geq 8.0 g/dL, platelet count \geq 75,000/mm³
- RRMM patients who received \geq 1 prior therapeutic regimen, prior lenalidomide is allowed however, patients with MM refractory to lenalidomide are excluded
- NDMM patients with no prior therapy other than corticosteroids

Patient Characteristics (Enrolled as of October 1, 2020)	NDMM (N = 8)	RRMM (N = 24)
Median Age, Years (range)	74 (51 – 86)	67 (49 – 84)
Males : Females	4 : 4	13 : 11
ECOG Performance Status, 0 : 1 : 2	1 : 6 : 1	5 : 15 : 4
Median Years from Diagnosis to SRd Treatment, (range)	0.2 (0.0 – 5.7)	4.5 (0.4 – 22.2)
Median Regimens (range)	0	2 (1–8)
-Bortezomib exposed	0	24 (100.0)
-Carfilzomib exposed	0	4 (16.7)
-Lenalidomide exposed	0	9 (37.5)
-Pomalidomide exposed	0	5 (20.8)
-Daratumumab exposed	0	4 (16.7)
-Stem Cell Transplant	0	12 (50.0)



Treatment-Related Adverse Events ≥15% Patients

	NDMM (N=8)		RRMM (N=24)	
	Any Grade	Grade 3/4	Any Grade	Grade 3/4
Hematologic				
Thrombocytopenia	5 (62.5)	3 (37.5)	17 (70.8)	15 (62.5)
Neutropenia	6 (75.0)	6 (75.0)	15 (62.5)	15 (62.5)
Anaemia	5 (62.5)	4 (50.0)	7 (29.2)	4 (16.7)
Gastrointestinal				
Nausea	4 (50.0)	0	14 (58.3)	1 (4.2)
Decreased appetite	1 (12.5)	1 (12.5)	12 (50.0)	2 (8.3)
Diarrhoea	5 (62.5)	0	8 (33.3)	0
Vomiting	1 (12.5)	0	7 (29.2)	0
Constipation	2 (25.0)	0	5 (20.8)	0
Dehydration	1 (12.5)	0	4 (16.7)	1 (4.2)
Constitutional				
Fatigue	5 (62.5)	4 (50.0)	13 (54.2)	4 (16.7)
Weight decreased	5 (62.5)	0	10 (41.7)	2 (8.3)
Asthenia	1 (12.5)	0	4 (16.7)	1 (4.2)
Insomnia	3 (37.5)	1 (12.5)	2 (8.3)	0
CNS				
Dizziness	1 (12.5)	0	5 (20.8)	0

RP2D in NDMM and RRMM:

- Selinexor 60 mg on Days 1, 8, 15, 22
- Lenalidomide 25 mg po days 1-21
- Dexamethasone 40 mg on Days 1, 8, 15, 22

2/6 patients had a DLT at Selinexor 80 mg cohort: (G4 PLT, n=2)

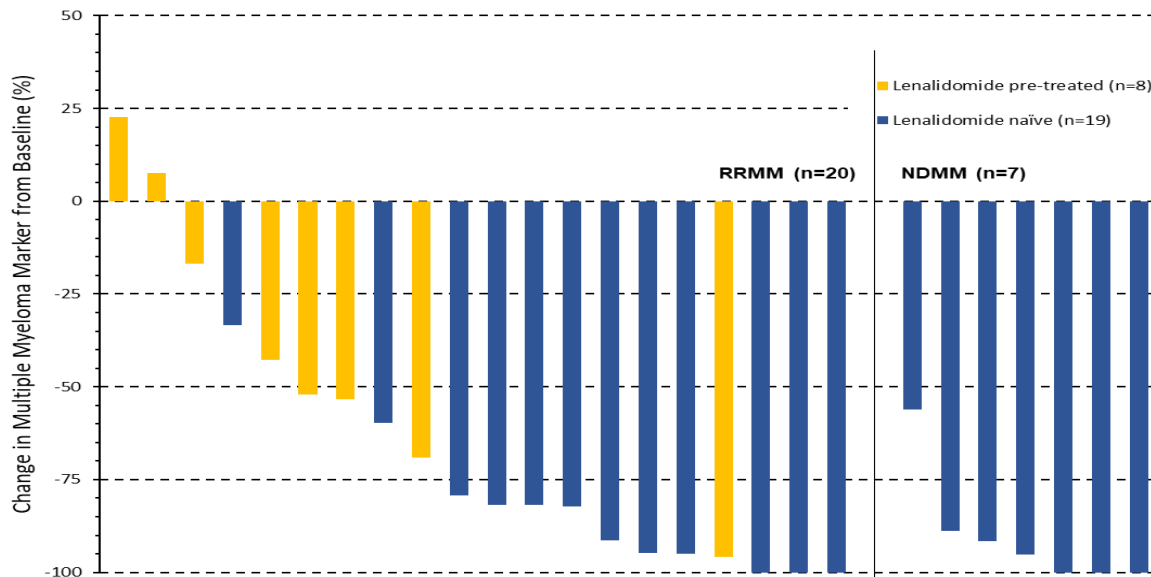
(as of October 1, 2020)



Selinexor – Lenalidomide – dex Efficacy: ORR

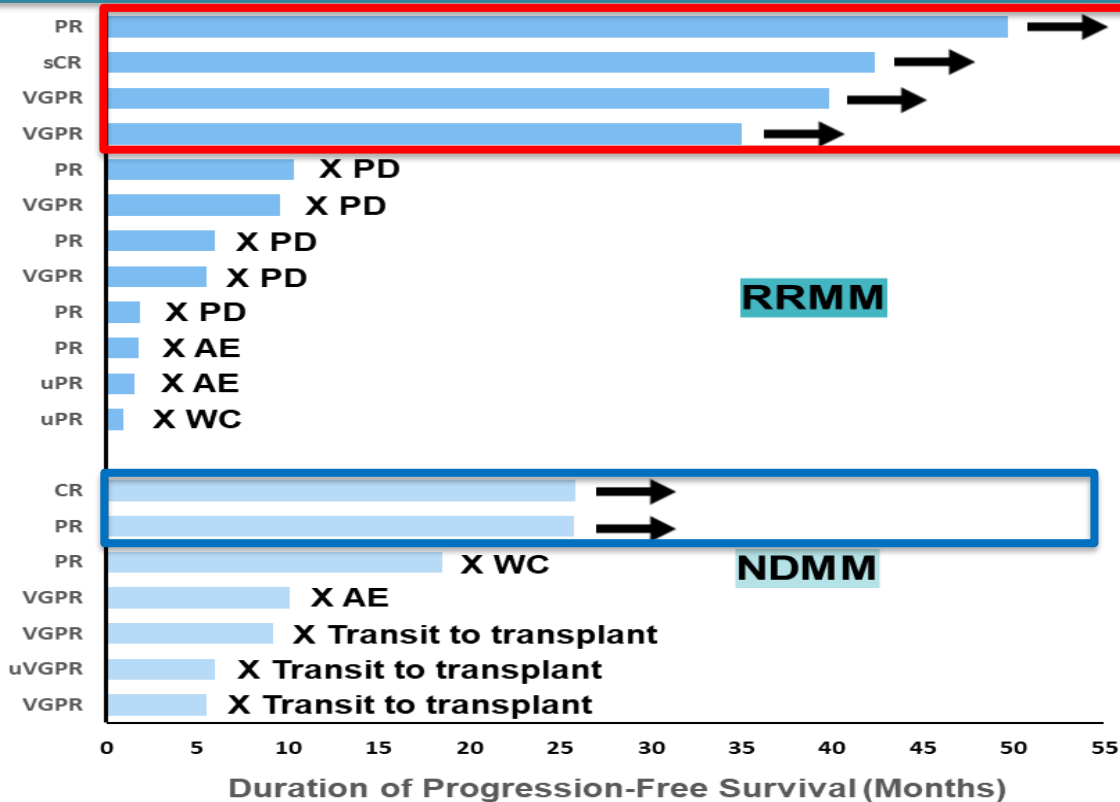
Best Responses in Evaluable SRd Patients

Category	N	ORR (%)	CBR (%)	CR (%)	VGPR (%)	PR (%)	MR (%)	SD (%)	PD (%)
Len-Naïve Evaluable RRMM Patients	12	11 (91.7)	11 (91.7)	1 (8.3)	4 (33.3)	6 (50.0) [†]	0	1 (8.3)	0
Len-Exposed/Refractory MM	8	1 (12.5)	3 (37.5)	-	-	1 (12.5)	2 (25.0)	4 (50.0)	1 (12.5)
Efficacy Evaluable NDMM Patients	7*	7 (100)	7 (100)	1 (14.3)	4 (57.1) [‡]	2 (28.6)	-	-	-



Responses were determined according to the International Myeloma Working Group (IMWG) criteria. [†]2 PRs were unconfirmed. [‡]1 VGPR was unconfirmed. *1 patient was efficacy not evaluable due to withdrawal of consent during cycle 1. ORR=Overall Response Rate (CR+VGPR+PR), CBR=Clinical Benefit Rate (ORR+MR), CR=Complete Response, VGPR=Very Good Partial Response, PR=Partial Response, MR=Minimal Response, SD=Stable Disease, PD=Progressive Disease. Responses as of October 1, 2020 based on interim unaudited data.

Selinexor –Lenalidomide- dex Efficacy: Time on Therapy: Durable Response with Time on Therapy > 2 years



Patients ongoing with RRMM with PFS > 35 months

Patients ongoing with NDMM with PFS > 24 months

arrow = still active as of data cutoff date, X WC = treatment discontinued due to withdrawal of consent, X PD = treatment discontinued due to progressive disease, X AE = treatment discontinued due to adverse event(s)

Summary and Conclusions

- The RP2D of SRd is once-weekly selinexor 60 mg + Lenalidomide 25 mg daily (days 1-21) + once-weekly dexamethasone 40 mg
- The combination is highly active with ORR – 100% in NDMM patients and 92% in Len-naïve RRMM
- The responses are durable with patients on > 2-3 years
- The most common TRAEs are thrombocytopenia, neutropenia, nausea, and fatigue which are expected and can be managed with supportive care and/or dose modifications
- All oral combination of selinexor / lenalidomide / dexamethasone appears to be highly active, well tolerated and warrants further investigation

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