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Biotechnology
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December 7, 2023
NEUTRAL
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Allarity Therapeutics Inc.

Early Data Encouraging; More Patients and DRP Scores Are Expected

ALLR (NASDAQ)

Company & Market Data	
Closing Price (as of 12/06/2023)	$0.50
Rating:	NEUTRAL
Price Target:	NA
52 Week Range:	$0.45 - $1,890.03
Shares Outstanding (MM):	4.6
Market Capitalization (MM):	$2
Cash (MM):	$1.4
Debt (MM):	$1.5
Fiscal Year End:	Dec

Estimates			
EPS	**2022A**	**2023E**	**2024E**
1Q	$(785.78)	$(177.06)A	$(0.14)
2Q	$(723.08)	$(26.28)A	$(0.15)
3Q	$(947.81)	$(2.24)A	$(0.13)
4Q	$(636.77)	$(0.25)	$(0.14)
Full Year	$(3,093.42)	$(205.83)	$(0.56)
Revenue (MM)	$0.0	$0.0	$0.0

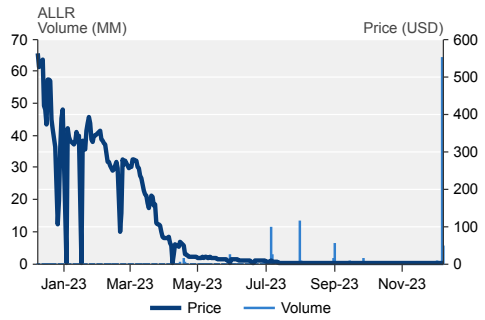


Chart data: Bloomberg

- We are very encouraged by the early ALLR data showing 5/5 (100%) responses in advanced ovarian cancer patients treated with stenoparib, an ex-Eisai (TYO:4523, ¥7,462.00, NR) PARP inhibitor. What's even more encouraging, all five patients were pre-selected by using ALLR's proprietary DRP transcriptomic CDx (companion diagnostic) with each pre-selected patient showing more than 50% DRP score (per assumption, >50% score implies the likelihood of responding to treatment). Out of five patients, one patient showed a 100% reduction of tumor (complete response, CR), and the rest four patients showed a tumor reduction of 8-19% (stable disease, SD). Notably, all five responding patients previously progressed on another PARP inhibitor, and, supposedly, were not expected to respond to stenoparib. We think these results are clear signs of clinical applicability and relevance of ALLR's DRP CDx, and as ALLR reports more stenoparib responses (and DRP scores) from the rest of the 10-15 ovarian cancer patients, we may become more enthusiastic about our valuation thesis.
- Partially the success of stenoparib may be explained by the recent protocol amendment implemented by ALLR: instead of 600mg QD dosing, ALLR used BID dosing (200mg morning, 400mg evening). Stenoprib also showed a remarkably differentiated AE profile based on unpublished data from 42 patients (Exhibit 7).
- There is still a financing overhang for ALLR, as the company is trying to attract new or existing investors for what essentially is "bridge financing" until the full stenoparib data is available at some point in 1H24. ALLR has almost no cash and ~$17M in total liabilities, which makes the bar for a clinical breakthrough significantly higher as compared to other, better-financed, companies. We actually think that if these responses were reported by other, more established ovarian cancer companies (without the recent history of delays, reverse-splits, and with a stable institutional ownership base), the market response would have been much more welcoming, with perhaps hundreds of millions of dollars in accretive market valuation.
- We assume all ALLR needs to do now is to financially survive until the full readout of stenoparib data on 15-20 patients, with more clinical details around this trial - duration of responses, the DRP scores (including patients excluded from the trial), the AE profile, etc. Or, ALLR may need to find a lead investor willing to take a risk of early investment now and then rip a potentially significant return.
- One of the precision oncology companies in our coverage, Acrivon (ACRV, $5.55, BUY), has a similar to ALLR's strategy: in-licensing promising assets from large biopharma companies by leveraging a proprietary companion diagnostic to select patients likely to respond. So far, ACRV has been able to laser-focus on a single asset, prexasertib, to prove the viability of its approach, but ACRV has not shown definitive responses to prexasertib based on its CDx selection yet.
- We think that ALLR's stenoparib, which was in-licensed from Eisai, is not that much different (perhaps better, with DRP CDx) from the comparable approved PARP inhibitors. Given that ALLR's stenoparib is the late entrant to already crowded markets, the entrance strategies would have to be carefully planned, to avoid running lengthy and costly Ph3 trials.

Exhibit 1*: Stenoparib compares favorably to olaparib and other PARP inhibitors. The absence of myelotoxicity may eventually become one of the most important characteristics of stenoparib. Overall, patient selection with DRP CDx is the most valuable point in stenoparib's package

Stenoparib: Potentially Best-in-Class in the PARPi Landscape

"… the identification of reliable biomarkers will be critical for the success of this targeted agent" [1]

Product	Owner	Stage	Response biomarker	Export Resistance (PgP mediated)	Absence of Myelotoxicity (Myelotox)	Multi-targeted (PARP/ Tankyrase)	PARP trapping	BBB penetration	Strong maintenance opportunity
Stenoparib	allarity THERAPEUTICS	Phase 2	DRP®	✓	✓	✓	✓	✓	✓
Niraparib	gsk | TESARO	Approved	Platinum response	✗	✗	✗	✓	✓	✓
Olaparib	AstraZeneca	Approved	BRCA	✗	✗	✗	✓	✗	✓
Rucaparib	pharma&	Approved	Platinum response	✗	✗	✓	✓	✗	✓
Talazoparib	Pfizer	Approved	BRCA	✓	✗	✗	✓	✗	✓
Senaparib	TopAlliance | IMPACT THERAPEUTICS	Phase 3	BRCA	–	✗	✗	✓	–	✓
Veliparib	abbvie	Phase 3	BRCA	✗	✗	✗	✗	✗	✗
Pamiparib	BeiGene	Phase 2/3	BRCA	✓	✗	✗	✓	✓	✓

Allarity PARP inhibitor (Stenoparib) with exclusive DRP®: a novel, multi-targeted drug (Tankyrase and PARP inhibition) with potential best-in-class efficacy and safety profiles, aimed at improving outcomes in hard-to-treat patient populations.

allarity THERAPEUTICS

Lars M. Wagner, "Profile of veliparib and its potential in the treatment of solid tumors." Onco Targets Ther. 2015; 8: 1931–1939. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4524591 NCT03878849

Source: ALLR investor presentation, March 2023
**Ladenburg Thalmann & Co Inc. does not cover any of the companies listed in the table. Mention of specific companies not covered by Ladenburg Thalmann & Co Inc. is not a recommendation to buy, hold or sell the securities mentioned*

Exhibit 2: PARP inhibitors are toxic – and this is partially because these inhibitors are administered indiscriminately to all-comers (in a big pharma fashion). It is very likely that if DRP works, stenoparib will demonstrate a higher percentage of responders and will have fewer toxicities (for non-responders these drugs become too toxic)

Withdrawals of Indications for Approved PARPi's Create Opportunity

Recent, partial withdrawals of indications for niraparib, olaparib, and rucaparib

- Manufacturers of the following PARP inhibitors have voluntarily **withdrawn indications** for heavily pretreated patients with BRCA-mutated **advanced ovarian cancer** due to safety concerns:
  - As a result of clinical trials evaluating **niraparib** as fourth-line or later therapy for BRCA-mutated advanced ovarian cancer patients. **GSK/Tesaro** has withdrawn this indication from its label due to a potential detrimental effect on overall survival.
  - **AstraZeneca and Merck** have voluntarily withdrawn accelerated approval for **olaparib** for adults with BRCA-mutated advanced ovarian cancer who have received at least 3 prior lines of chemotherapy following a safety analysis of the SOLO3 trial which suggested a detrimental effect on survival in certain subgroups.
  - **Clovis** pulled the indication for **rucaparib** for BRCA-mutated ovarian cancer after at least 2 prior chemotherapies in the United States and Europe, after the **European Medicines Agency** recommended restricting the use of rucaparib based on differences in overall survival compared to chemotherapy.

THE OPPORTUNITY

- Withdrawals highlight **need for more effective PARP inhibitors.**
- Withdrawn indications create a **market opening for Stenoparib** targeting heavily pretreated ovarian cancer patients.

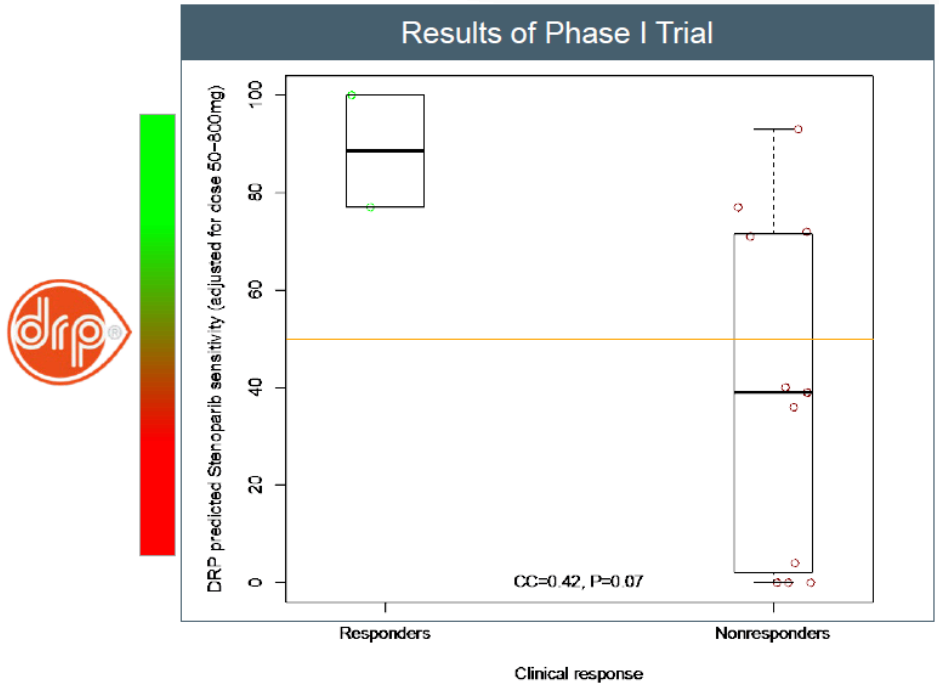
allarity THERAPEUTICS

Source: ALLR investor presentation, November 2023

Exhibit 3: At the heart of ALLR's future is the DRP CDx platform. DRP needs to continuously validate itself in prospective trials of stenoparib

Stenoparib-DRP® CDx Identifies Responsive Patients

Stenoparib DRP® CDx (414 mRNAs) Identifies Responsive Patients in the Eisai Phase 1 trial



Plummer et al, ASCO 2018, Plummer et al, Br J Cancer 123(4):525-533, 2020

Response rate below DRP® cutoff of 50: 0% (0 of 7)

Response rate above DRP® cutoff of 50: 33% (2 of 6)

Response rate without DRP: 15% (2/13)

All 8 histologies

Source: ALLR investor presentation, November 2023

Exhibit 4: ALLR announced that all five initially evaluable patients showed some level of response (1 CR, 4 SDs). It is unclear what the DRP score of the non-selected patients was

Stenoparib: Phase 2 Monotherapy Study in 3rd Line OC

Currently enrolling patients in US and UK; Interim Data Readout Anticipated in Q1 2024

- **Ongoing Phase 2 monotherapy study** of Stenoparib (**formerly 2X-121, E7449**) in advanced ovarian cancer (OC).
  - Patients with predicted high likelihood of responding to stenoparib using **DRP® CDx** included in the study.
  - **Patients previously treated with another PARP inhibitor and chemotherapy**.
- Open label, multicenter, single arm study evaluating stenoparib as single agent therapy in a 28-days cycle in advanced OC patients.
- Recruiting trial sites in both the **U.S. and U.K;**. expansion of trial sites in 2022 to accelerate enrollment.
- Protocol amendment to **twice daily (BID) dosing** (200 mg morning, 400 mg evening) in effect from end of Q1 2023.
- ClinicalTrials.gov ID: **NCT03878849**

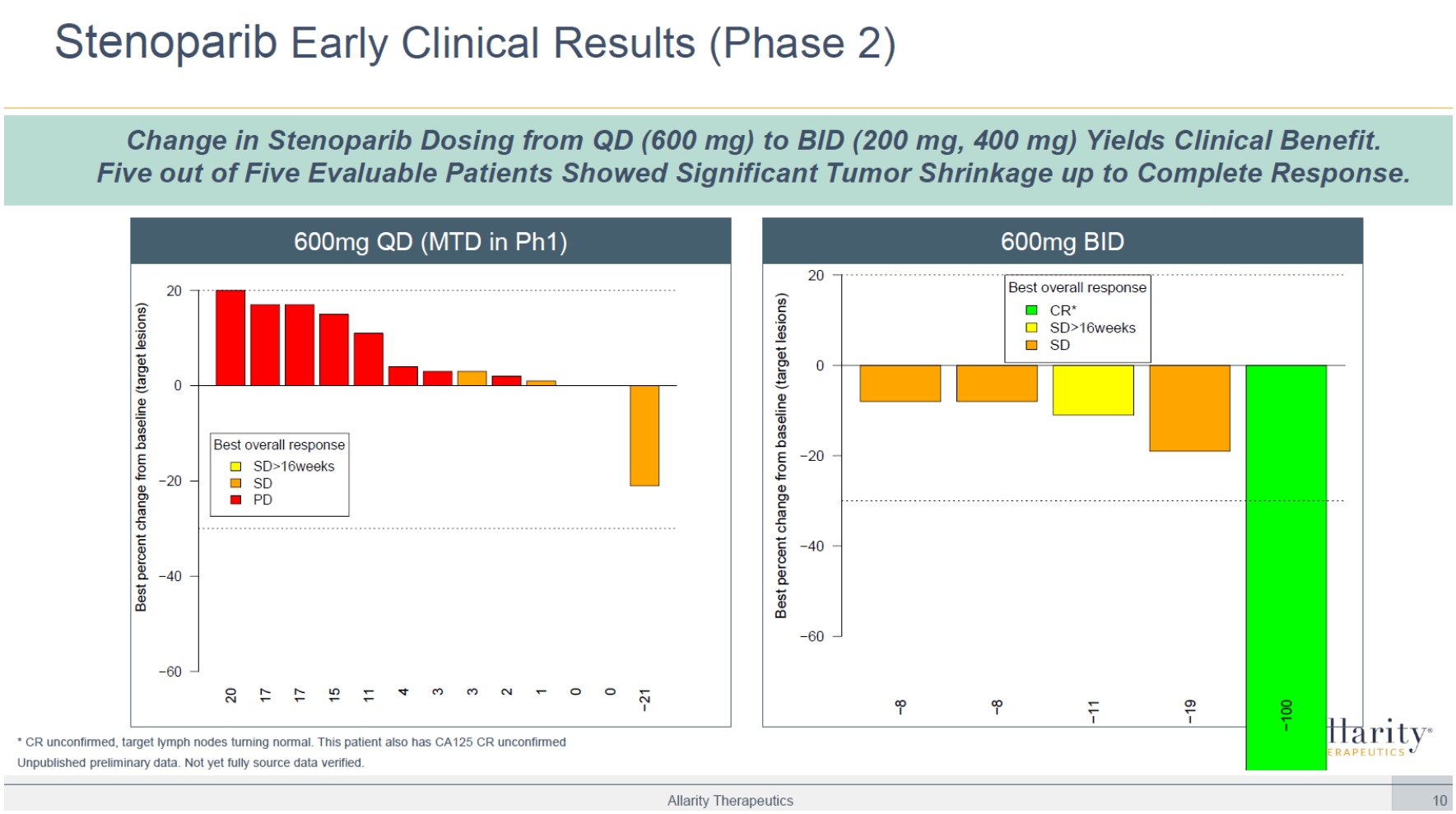
THE OPPORTUNITY

- PARP inhibitors have **gained market share in numerous indications**
- **Resistance creates opportunities** for additional lines of treatment
- **Tankyrase inhibition** is a potent add-on to PARP inhibition
- Stenoparib-**DRP® CDx** identifies a **broader pool of likely responder patients** beyond BRCA status.

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Source: ALLR investor presentation, December 2023

Exhibit 5: It is remarkable that one patient showed a CR – 100% reduction of tumor, given that all patients previously had a PARP inhibitor

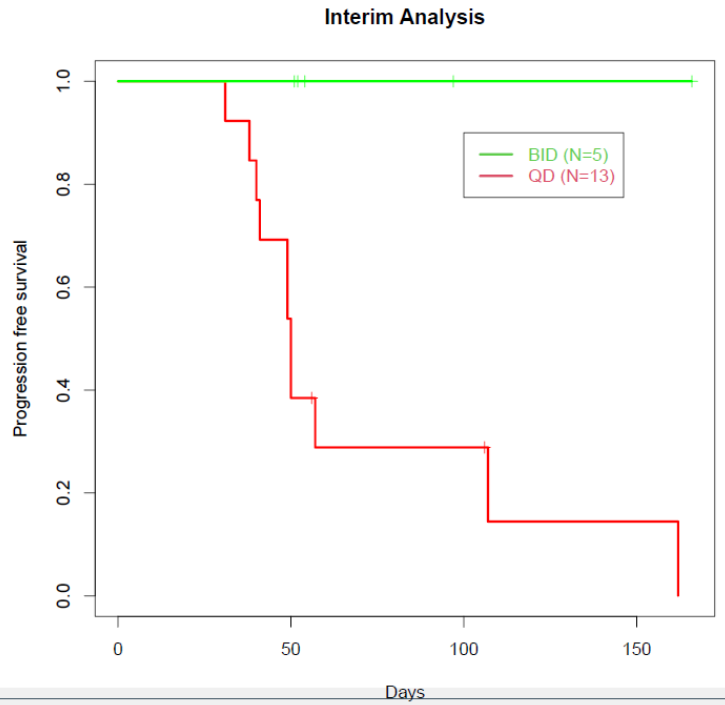


Source: ALLR investor presentation, December 2023

Exhibit 6: All five responding patients had a DRP score of more than 50%, which is a significant early validation if it holds in the later data

Stenoparib Successful Phase 2 Dose Optimization

Kaplan-Meier Shows Large Difference in PFS in QD and BID populations



All evaluable patients were selected with Stenoparib-DRP® cDX scores >=50%

Allarity Therapeutics 11

Source: ALLR investor presentation, December 2023

Exhibit 7: The initial safety profile for stenoparib looks attractive, even as compared to Lynparza

Stenoparib Has Low Myelotoxicity

Potential Best-in-Class Safety Profile & Ability to Combine with Other Drugs

Stenoparib QD+BID (N=42)[1]

	Grade 1-4	Grade 3-4
Neutropenia	2%	0%
Anemia	21%	7%
Thrombocytopenia	0%	0%

Niraparib QD (N=463)[2]

	Grade 1-4	Grade 3-4
Neutropenia	20%	13%
Anemia	51%	27%
Thrombocytopenia	52%	28%

[1] Unpublished, preliminary data from ongoing Phase 2 study of Stenoparib in DRP®-selected advanced ovarian cancer patients and prior Phase 2 study in DRP®-selected metastatic breast cancer patients.

2. Niraparib QUADRA results in FDA label 2021

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Source: ALLR investor presentation, December 2023

Exhibit 8: Lynparza has a long list of approved indications. The list is being constantly updated. Notably, for ovarian cancer, Lynparza is prescribed to BRCA-mutated patients, with CDx

HIGHLIGHTS OF PRESCRIBING INFORMATION
These highlights do not include all the information needed to use LYNPARZA safely and effectively. See full prescribing information for LYNPARZA.

LYNPARZA® (olaparib) tablets, for oral use
Initial U.S. Approval: 2014

RECENT MAJOR CHANGES

Indications and Usage (1.3)	9/2023
Dosage and Administration (2.1)	9/2023
Indications and Usage (1.8)	5/2023
Dosage and Administration (2)	5/2023
Warnings and Precautions, Myelodysplastic Syndrome/ Acute Myeloid Leukemia (5.1)	11/2023

INDICATIONS AND USAGE

Lynparza is a poly (ADP-ribose) polymerase (PARP) inhibitor indicated:

Ovarian cancer

- for the maintenance treatment of adult patients with deleterious or suspected deleterious germline or somatic *BRCA*-mutated advanced epithelial ovarian, fallopian tube or primary peritoneal cancer who are in complete or partial response to first-line platinum-based chemotherapy. Select patients for therapy based on an FDA-approved companion diagnostic for Lynparza. (1.1, 2.1)
- in combination with bevacizumab for the maintenance treatment of adult patients with advanced epithelial ovarian, fallopian tube or primary peritoneal cancer who are in complete or partial response to first-line platinum-based chemotherapy and whose cancer is associated with homologous recombination deficiency (HRD)-positive status defined by either:
  - a deleterious or suspected deleterious *BRCA* mutation, and/or
  - genomic instability.

  Select patients for therapy based on an FDA-approved companion diagnostic for Lynparza. (1.2, 2.1)
- for the maintenance treatment of adult patients with deleterious or suspected deleterious germline or somatic *BRCA*-mutated recurrent epithelial ovarian, fallopian tube or primary peritoneal cancer, who are in complete or partial response to platinum-based chemotherapy. Select patients for therapy based on an FDA-approved companion diagnostic for Lynparza. (1.3, 2.1)

Breast cancer

- for the adjuvant treatment of adult patients with deleterious or suspected deleterious g*BRCA*m human epidermal growth factor receptor 2 (HER2)-negative high risk early breast cancer who have been treated with neoadjuvant or adjuvant chemotherapy. Select patients for therapy based on an FDA-approved companion diagnostic for Lynparza. (1.4, 2.1)
- for the treatment of adult patients with deleterious or suspected deleterious g*BRCA*m, HER2-negative metastatic breast cancer who have been treated with chemotherapy in the neoadjuvant, adjuvant or metastatic setting. Patients with hormone receptor (HR)-positive breast cancer should have been treated with a prior endocrine therapy or be considered inappropriate for endocrine therapy. Select patients for therapy based on an FDA-approved companion diagnostic for Lynparza. (1.5, 2.1)

Pancreatic cancer

- for the maintenance treatment of adult patients with deleterious or suspected deleterious g*BRCA*m metastatic pancreatic adenocarcinoma whose disease has not progressed on at least 16 weeks of a first-line platinum-based chemotherapy regimen. Select patients for therapy based on an FDA-approved companion diagnostic for Lynparza. (1.6, 2.1)

Prostate cancer

- for the treatment of adult patients with deleterious or suspected deleterious germline or somatic homologous recombination repair (HRR) gene-mutated metastatic castration-resistant prostate cancer (mCRPC) who have progressed following prior treatment with enzalutamide or abiraterone. Select patients for therapy based on an FDA-approved companion diagnostic for Lynparza. (1.7, 2.1)
- in combination with abiraterone and prednisone or prednisolone for the treatment of adult patients with deleterious or suspected deleterious *BRCA*-mutated (*BRCA*m) metastatic castration-resistant prostate cancer (mCRPC). Select patients for therapy based on an FDA-approved companion diagnostic for Lynparza. (1.8, 2.1)

DOSAGE AND ADMINISTRATION

- Recommended dosage is 300 mg taken orally twice daily with or without food. See Full Prescribing Information for the recommended duration. (2.2)
- Patients receiving Lynparza for mCRPC should also receive a gonadotropin-releasing hormone (GnRH) analog concurrently or should have had bilateral orchiectomy. (2.2)
- For moderate renal impairment (CLcr 31-50 mL/min), reduce Lynparza dosage to 200 mg orally twice daily. (2.5)

DOSAGE FORMS AND STRENGTHS

Tablets: 150 mg, 100 mg (3)

CONTRAINDICATIONS

None. (4)

WARNINGS AND PRECAUTIONS

- Myelodysplastic Syndrome/Acute Myeloid Leukemia (MDS/AML): Occurred in approximately 1.2% of patients with various *BRCA*m, g*BRCA*m, HRR gene-mutated or HRD-positive cancers exposed to Lynparza and the majority of events had a fatal outcome. Monitor patients for hematological toxicity at baseline and monthly thereafter. Discontinue if MDS/AML is confirmed. (5.1)
- Pneumonitis: Occurred in 0.8% of patients exposed to Lynparza, and some cases were fatal. Interrupt treatment if pneumonitis is suspected. Discontinue if pneumonitis is confirmed. (5.2)
- Venous thromboembolism (VTE), including severe or fatal pulmonary embolism (PE), occurred in patients treated with Lynparza. VTE occurred in 8% of patients with mCRPC. Monitor patients for signs and symptoms of VTE and PE and treat as medically appropriate. (5.3)
- Embryo-Fetal Toxicity: Can cause fetal harm. Advise of the potential risk to a fetus and to use effective contraception. (5.4, 8.1, 8.3)

ADVERSE REACTIONS

Most common adverse reactions (≥10%) in clinical trials:

- as a single agent were nausea, fatigue (including asthenia), anemia, vomiting, diarrhea, decreased appetite, headache, dysgeusia, cough, neutropenia, dyspnea, dizziness, dyspepsia, leukopenia, and thrombocytopenia. (6.1)
- in combination with bevacizumab were nausea, fatigue (including asthenia), anemia, lymphopenia, vomiting, diarrhea, neutropenia, leukopenia, urinary tract infection, and headache. (6.1)
- in combination with abiraterone and prednisone or prednisolone were anemia, fatigue, nausea, diarrhea, decreased appetite, lymphopenia, dizziness, and abdominal pain. (6.1)

To report SUSPECTED ADVERSE REACTIONS, contact AstraZeneca at 1-800-236-9933 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

DRUG INTERACTIONS

- Strong or moderate CYP3A inhibitors: Avoid concomitant use. If concomitant use cannot be avoided, reduce Lynparza dosage. (2.4, 7.2, 12.3)
- Strong or moderate CYP3A inducers: Avoid concomitant use. (7.2, 12.3)

USE IN SPECIFIC POPULATIONS

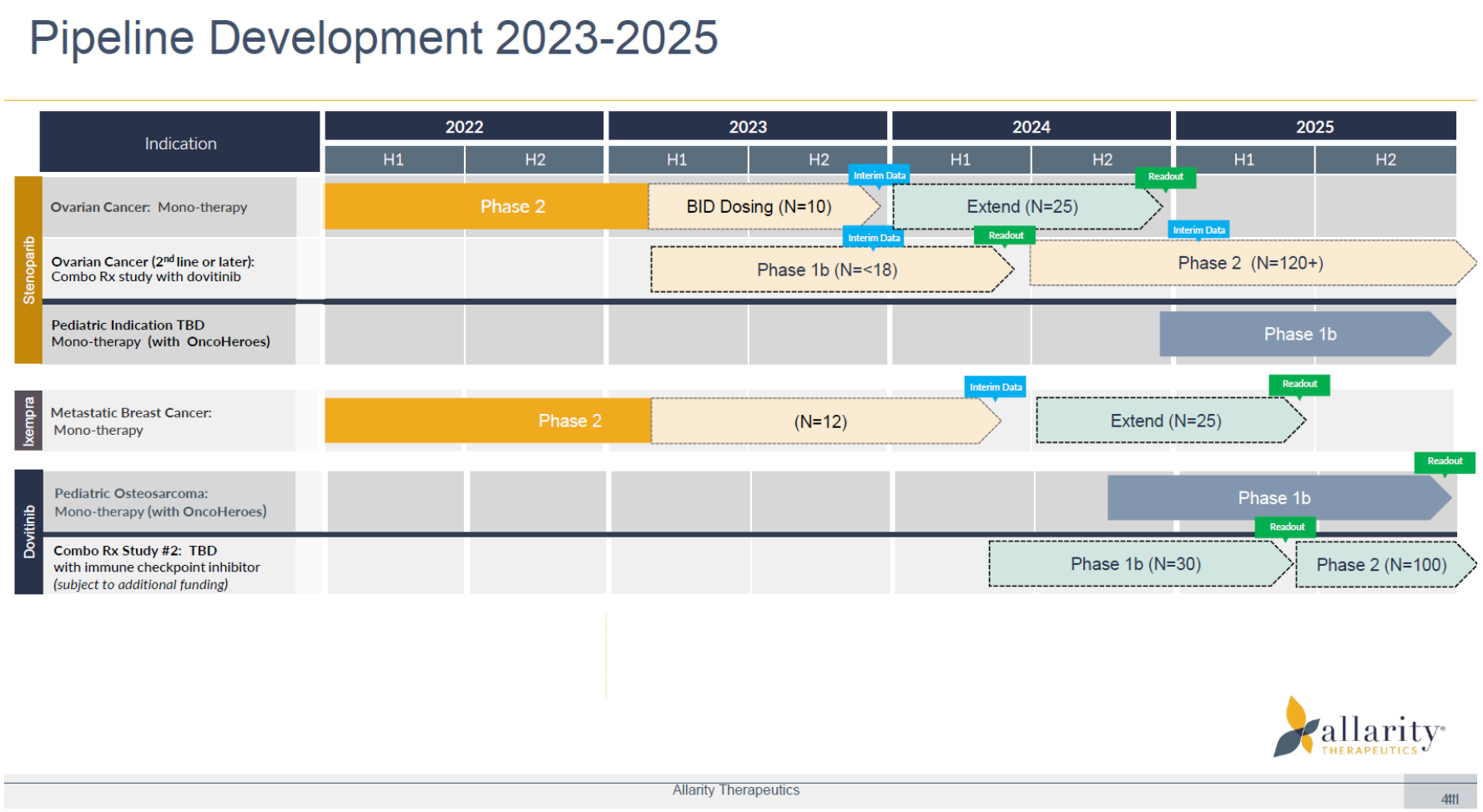
Lactation: Advise women not to breastfeed. (8.2)

See 17 for PATIENT COUNSELING INFORMATION and Medication Guide.

Revised: 11/2023

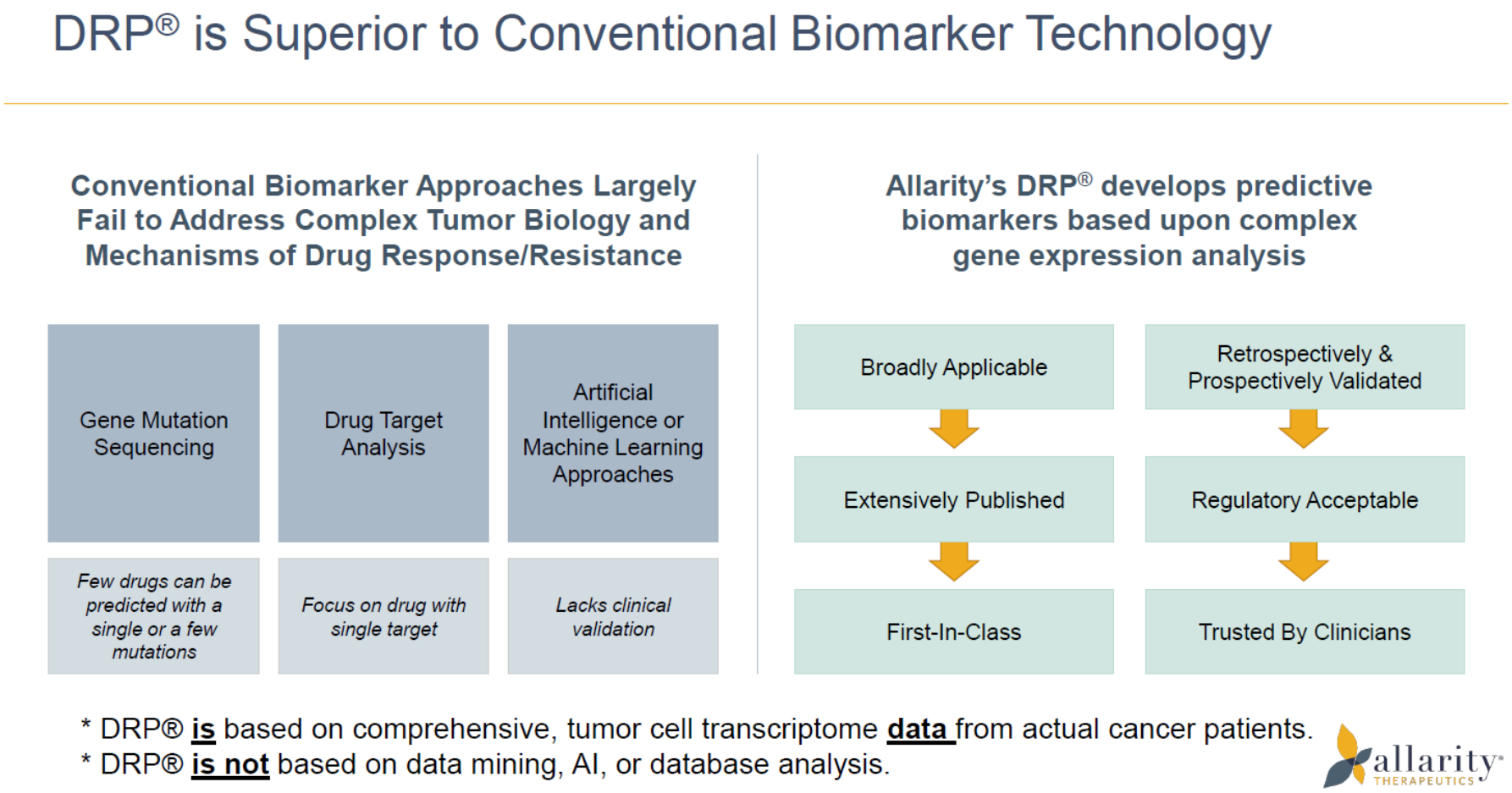
Source: FDA website

Exhibit 9: The full monotherapy stenoparib data in ovarian cancer is expected in 2024. We estimate the data from 10-15 more stenoparib patients will be available, as well as the DRP scores for each patient, even for those not selected for treatment



Source: ALLR investor presentation, December 2023

Exhibit 10: Overall, we acknowledge there is value in the DRP platform, we are just not sure how to apply that value. Presumably, DRP has to be connected to a specific drug, as long as ALLR is considered to be a biopharma company (perhaps now the focus is on ovarian cancer and stenoparib)



Source: ALLR investor presentation, March 2023

Exhibit 11: PARP inhibitors – consensus projected sales. Lynparza (olaparib) seems to dominate now and in 2028, mainly due to the broad FDA label and multiple indications

All Financial Data in US $ (mln)

Rank	Product	Generic Name	Company	Pharmacological Class	Patent Expiry	Annual Sales WW - Sales 2022	2028	CAGR	Total Change	F (Sales)	WW Phase (Current)	Company Product Name
1	Lynparza	olaparib	AstraZeneca	Poly (ADP-ribose) polymerase (PARP) 1, 2 & 3 inhibitor	Apr 2028	2,638	3,733	6%	1,095	F	Marketed	Lynparza
2	Zejula	niraparib	GSK	Poly (ADP-ribose) polymerase (PARP) 1 & 2 inhibitor	Mar 2030	580	795	5%	216	F	Marketed	Zejula
3	Talzenna	talazoparib tosylate	Pfizer	Poly (ADP-ribose) Polymerase (PARP) inhibitor	Oct 2031	41	507	52%	467	F	Marketed	Talzenna
4	Zejula	niraparib	Zai Lab	Poly (ADP-ribose) polymerase (PARP) 1 & 2 inhibitor	-	145	361	16%	215	F	Marketed	Zejula
5	Zejula	niraparib	Johnson & Johnson	Poly (ADP-ribose) polymerase (PARP) 1 & 2 inhibitor	Feb 2032	-	175	n/a	175	F	Approved	Niraparib
6	Zejula	niraparib	Takeda	Poly (ADP-ribose) polymerase (PARP) 1 & 2 inhibitor	Sep 2028	97	159	9%	62	F	Marketed	Zejula
7	Pamiparib	pamiparib	BeiGene	Poly (ADP-ribose) polymerase (PARP) 1 & 2 inhibitor	Dec 2031	5	100	62%	95	F	Marketed	Pamiparib
8	AZD5305	-	AstraZeneca	Poly (ADP-ribose) Polymerase (PARP) inhibitor	-	-	67	n/a	67	F	Phase II	AZD5305
Other						139	-	n/a	n/a			
Total						3,645	5,897	8%	2,252			

Source: 2023 EvaluatePharma, Evaluate Ltd
**Ladenburg Thalmann & Co Inc. does not cover any of the companies listed in the table. Mention of specific companies not covered by Ladenburg Thalmann & Co Inc. is not a recommendation to buy, hold or sell the securities mentioned*

Exhibit 12: ALLR P&L Forecast

Allarity Therapeutics (ALLR)

($1000s, except per share data) [FY - Dec]

	2020	2021	2022	1Q23	2Q23	3Q23	4Q23E	2023E	1Q24E	2Q24E	3Q24E	4Q24E	2024E	2025E	2026E	2027E
Total Risk-adjusted Revenues	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**8,586**
stenoparib, risk-unadjusted	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	85,865
Probability of success															*10%*	*10%*
stenoparib, risk-adjusted	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,586
R&D revenue		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total revenues, un-adjusted	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	85,865
Cost of Goods																
COGS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	859
Gross profit	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**7,728**
Operating expenses																
Research and development (GAAP)	4,218	14,196	6,930	1,427	1,105	1,948	1,967	6,447	1,987	2,385	2,504	2,629	9,505	12,356	14,209	2,576
Adjusted Research and development (non-GAAP)	3,910	11,012	6,054	1,427	1,015	1,886	1,905	6,233	1,924	2,309	2,424	2,545	9,202	11,043	12,734	1,374
Share-based Compensation to R&D	308	3,184	876	-	90	62	63	215	63	76	80	84	303	1,313	1,475	1,202
% of total share-based compensation	*50%*	*50%*	*50%*	*50%*	*50%*	*50%*	*50%*	*70%*	*50%*	*50%*	*50%*	*50%*	*50%*	*50%*	*50%*	*50%*
Selling, general and administrative (GAAP)	4,101	12,360	9,962	2,232	3,051	2,478	2,503	10,264	2,528	3,033	3,185	3,344	12,091	13,904	15,294	21,466
Adjusted Selling, General and Administrative (non-GAAP)	3,793	9,176	9,086	2,232	2,961	2,416	2,440	10,049	2,465	2,957	3,105	3,261	11,788	12,591	13,819	20,264
Share-based Compensation to SG&A	308	3,184	876	-	90	62	63	215	63	76	80	84	303	1,313	1,475	1,202
% of total share-based compensation	*50%*	*50%*	*50%*	*50%*	*50%*	*50%*	*50%*	*30%*	*50%*	*50%*	*50%*	*50%*	*50%*	*50%*	*50%*	*50%*
Total share-based compensation (excluded from non-GA	616	6,368	1,752	(121)	180	124	125	308	126	152	159	167	605	2,626	2,950	2,404
Proceeds from sales of IP or impairment of intangibles	-	(1,005)	17,571	-	-	-	-	-	-	-	-	-	-	-	-	-
Total operating expenses (COGS, R&D, SG&A, in-process	**8,319**	**25,551**	**34,463**	**3,659**	**4,156**	**4,426**	**4,470**	**16,711**	**4,515**	**5,418**	**5,689**	**5,973**	**21,595**	**26,260**	**29,504**	**24,901**
Operating income (loss)	**(8,319)**	**(25,551)**	**(34,463)**	**(3,659)**	**(4,156)**	**(4,426)**	**(4,470)**	**(16,711)**	**(4,515)**	**(5,418)**	**(5,689)**	**(5,973)**	**(21,595)**	**(26,260)**	**(29,504)**	**(16,314)**
Interest income (expense)	(320)	(499)	(193)	(88)	(139)	(22)	(22)	(271)	-	5	138	114	256	248	283	518
Finance costs	-	(1,347)	-	(9)	-	-	-	(9)	-	-	-	-	-	-	-	-
Loss (gain) on investment	708	(495)	(115)	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain on the sale of IP			1,780	-	-	-	-	-	-	-	-	-	-	-	-	-
Foreign exchange losses (gains), net	62	(95)	(913)	95	(26)	(156)	-	(87)	-	-	-	-	-	-	-	-
Fair value adjustment of derivative liabilities	2,131	2,087	17,125	-	1,941	157	157	2,255	141	127	114	103	486	-	-	-
Loss on extinguishment of convertible debt	(108)	(141)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Penalty on Series A Preferred stock liability	-	-	(800)	-	-	-	-	-	-	-	-	-	-	-	-	-
Change in fair value of convertible debt	(573)	(474)	-	309	-	-	-	309	-	-	-	-	-	-	-	-
Total non-operating income (expense)	**1,900**	**(964)**	**16,884**	**307**	**1,776**	**(21)**	**135**	**2,197**	**141**	**132**	**252**	**217**	**742**	**248**	**283**	**518**
Pre-tax income (loss)	**(6,419)**	**(26,515)**	**(17,579)**	**(3,352)**	**(2,380)**	**(4,447)**	**(4,335)**	**(14,514)**	**(4,374)**	**(5,286)**	**(5,437)**	**(5,756)**	**(20,853)**	**(26,012)**	**(29,221)**	**(15,797)**
Income tax benefit (expense) or adjustment	(198)	(133)	1,521	-	-	-	-	-	-	-	-	-	-	-	-	-
Tax rate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Net income (loss)	**(6,617)**	**(26,648)**	**(16,058)**	**(3,352)**	**(2,380)**	**(4,447)**	**(4,335)**	**(14,514)**	**(4,374)**	**(5,286)**	**(5,437)**	**(5,756)**	**(20,853)**	**(26,012)**	**(29,221)**	**(15,797)**
Deemed dividend of 8% or 5% on Preferred stock	-	-	(1,572)	(4)	(7,406)	(1,105)	-	-	-	-	-	-	-	-	-	-
Cash obligations on converted Series A Preferred stock	-	-	(3,421)	-	-	-	-	-	-	-	-	-	-	-	-	-
Net loss attributable to common stockholders	**(6,617)**	**(26,648)**	**(21,051)**	**(3,356)**	**(9,786)**	**(5,552)**	**(4,335)**	**(14,514)**	**(4,374)**	**(5,286)**	**(5,437)**	**(5,756)**	**(20,853)**	**(26,012)**	**(29,221)**	**(15,797)**
Other comprehensive loss, net of tax	2,476	(1,975)	(121)	-	-		-	-	-	-	-	-	-	-	-	-
Total other comprehesive income (loss)	**2,476**	**(1,975)**	**(121)**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Comprehensive income (loss)	**(4,141)**	**(28,623)**	**(16,179)**	**(1,780)**	**(2,380)**	**(4,447)**	**(4,335)**	**(14,514)**	**(4,374)**	**(5,286)**	**(5,437)**	**(5,756)**	**(20,853)**	**(26,012)**	**(29,221)**	**(15,797)**
Basic shares outstanding, average	2	5	7	19	372	2,475	17,520	15,433	30,954	36,054	41,154	41,354	36,154	43,954	48,954	51,454
Diluted shares outstanding, average	2	5	7	19	372	2,475	35,477	20,336	48,911	54,011	59,111	59,311	55,811	61,911	66,911	69,411
Diluted shares outstanding, EOP	4	10	25	331	1,891	22,144	48,811	48,811	49,011	59,011	59,211	59,411	59,411	64,411	69,411	69,411
GAAP EPS (basic)	**($2,837.50)**	**($5,866.85)**	**($3,093.42)**	**($177.06)**	**($26.28)**	**($2.24)**	**($0.25)**	**($205.83)**	**($0.14)**	**($0.15)**	**($0.13)**	**($0.14)**	**($0.56)**	**($0.59)**	**($0.60)**	**($0.31)**
GAAP EPS (diluted)	**($2,837.50)**	**($5,866.85)**	**($3,093.42)**	**($177.06)**	**($26.28)**	**($2.24)**	**($0.25)**	**($205.83)**	**($0.14)**	**($0.15)**	**($0.13)**	**($0.14)**	**($0.56)**	**($0.59)**	**($0.60)**	**($0.31)**

Source: ALLR SEC filings; Ladenburg Thalmann & Co. estimates

Key Risk Factors

In addition to typical economic and market risk factors that impact almost all biotech small-cap stocks, we believe that the primary risks to our recommendation and price target of investment in ALLR shares include, but are not limited to:

Commercial risk: Even if ALLR's product, stenoparib, is approved by the FDA and other regulatory agencies, stenoparib may not be competitive in the market as other agents could be more efficacious and better tolerated by patients.

Regulatory risk: stenoparib has not received approval from the FDA or EMA, and unexpected regulatory challenges or delays may appear during the regulatory approval process for ALLR's stenoparib. ALLR will not be able to sell its products if it does not obtain the required US or foreign regulatory approvals.

Clinical risk: ALLR's main product in clinical development is stenoparib, which we think may be in the Ph3 trial with the readouts in 2025-2027. For the Ph2/3-level oncology drugs, the probability of clinical success is between 5% and 80%. Specifically for ALLR, the success of the trials is heavily dependent on the functional applicability of the DRP platform.

Competition risk: There is a risk of competition from both existing products and other pipeline products under development for ALLR's lead stenoparib. Even if ALLR's lead product obtains regulatory approval, the commercial success may be impaired by the potential competition from other oncology agents, including TKIs.

Manufacturing risk: ALLR's lead product, stenoparib, may not be capable of being produced in commercial quantities at an acceptable cost, or at all. ALLR relies on third parties for its manufacturing activities. If the third parties fail to provide sufficient and timely supplies, ALLR may face manufacturing issues to support its development and/or commercialization activities.

IP risk: ALLR's US patents for stenoparib are currently expected to expire by 2040 (based on the DRP companion diagnostic). However, ALLR's IP could be challenged by other manufacturers even before the patent expiration.

Financial risk: Since its inception, ALLR has incurred operating losses. ALLR is expected to continue to incur additional operating expenditures in the next several years as it continues the development of its lead product stenoparib and other oncology drug candidates. ALLR will require significant additional funding for the clinical development and may require the pre-launch clinical operations in the form of dilutive equity.

The audited financial statements on December 31, 2022, 2021 and 2020 were prepared assuming that ALLR will continue operations as a going concern.

Foreign market risk: ALLR's future growth depends, in part, on its ability to access foreign markets, where the product would be subject to additional regulatory burden and market access/reimbursement uncertainties.

ALLR has a limited operating history and has never generated any revenues other than from research grants and a limited number of DRP biomarker development agreements.

ALLR identified material weaknesses in the internal control over financial reporting and has restated the financial statements for prior periods. If ALLR is unable to remediate

these material weaknesses, the company may not be able to accurately or timely report the financial condition or results of operations, which may adversely affect ALLR business and stock price.

If ALLR encounters difficulties enrolling patients in the ex-US or US clinical trials, the clinical development activities could be delayed or otherwise adversely affected.

ALLR's strategy involves risks and uncertainties that differ from other biotechnology companies that focus solely on new therapeutic candidates that do not have a history of failed clinical trials.

As an ''emerging growth company", ALLR may take advantage of certain exemptions from various public company reporting requirements, which may make ALLR stock less attractive to many investors.

The company's business, operations and clinical development plans and timelines and supply chain could be adversely affected by the effects of health epidemics, including the ongoing COVID-19 pandemic.

International operations may expose the company to business, regulatory, political, operational, financial, pricing and reimbursement risks associated with doing business outside of the US.

Because certain of the company's stockholders control a significant number of shares of common stock, they may have effective control over actions requiring stockholder approval.

ALLR has insufficient cash to continue operations, which are dependent on raising capital and these conditions give rise to substantial doubt over the Company's ability to continue as a going concern.

ALLR is in default under the license agreement with Novartis. ALLR is delinquent in payment to Eisai.

ALLR's assets are subject to a Security Agreement with 3i, LP and an event of default under the 3i June Promissory Note could adversely affect the business, financial condition, results of operations or liquidity. ALLR may not apply the 3i Proceeds in a manner that will increase the value of investment. There is no public market for the pre-funded warrants and common warrants to purchase common stock. The holders of the pre-funded warrants and common warrants will have no rights as common stockholders until such holders exercise their pre-funded warrants or common warrants and acquire shares of ALLR common stock. ALLR received a request for documents from the SEC in the investigation known as "In the Matter of Allarity Therapeutics, Inc.," and, separately, a letter from Nasdaq, regarding the same matter, the consequences of which are unknown. ALLR is subject to penalties if it fails to meet certain conditions of the Certificate of Designations of the Series A Preferred Stock. ALLR may incur substantial penalties if the company fails to maintain the effectiveness of the registration statement covering the resale of ALLR common stock issued to 3i, LP upon conversion of ALLR Series A Preferred Stock.

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APPENDIX A: IMPORTANT RESEARCH DISCLOSURES

ANALYST CERTIFICATION

I, Aydin Huseynov, M.D., CFA, attest that the views expressed in this research report accurately reflect my personal views about the subject security and issuer. Furthermore, no part of my compensation was, is, or will be directly or indirectly related to the specific recommendation or views expressed in this research report, provided, however, that:

The research analyst primarily responsible for the preparation of this research report has or will receive compensation based upon various factors, including the volume of trading at the firm in the subject security, as well as the firm's total revenues, a portion of which is generated by investment banking activities.

Additional information regarding the contents of this publication will be furnished upon request. Please contact Ladenburg Thalmann, Compliance Department, 640 Fifth Avenue, 4th floor, New York, New York 10019 (or call 212-409-2000) for any information regarding current disclosures, and where applicable, relevant price charts, in regard to companies that are the subject of this research report.

COMPANY BACKGROUND

Allarity Therapeutics, Inc. engages in the development of drugs for personalized treatment of cancer guided by its proprietary Drug Response Predictor (DRP) technology. The company was founded on April 4, 2021 and is headquartered in Cambridge, MA.

VALUATION METHODOLOGY

NA

RISKS

In addition to typical economic and market risk factors that impact almost all biotech small-cap stocks, we believe that the primary risks to our recommendation and price target of investment in ALLR shares include, but are not limited to:

Commercial risk: Even if ALLR's product, dovitinib, is approved by the FDA and other regulatory agencies, dovitinib may not be competitive in the market as other agents could be more efficacious and better tolerated by patients.

Regulatory risk: dovitinib has not received approval from the FDA or EMA, and unexpected regulatory challenges or delays may appear during the regulatory approval process for ALLR's dovitinib. ALLR will not be able to sell its products if it does not obtain the required US or foreign regulatory approvals.

Clinical risk: ALLR's main product in clinical development is dovitinib, which we think may be in the Ph3 trial with the readouts in 2024-2025. For the Ph2/3-level oncology drugs, the probability of clinical success is between 5% and 80%. Specifically for ALLR, the success of the trials is heavily dependent on the functional applicability of the DRP platform.

Competition risk: There is a risk of competition from both existing products and other pipeline products under development for ALLR's lead dovitinib. Even if ALLR's lead product obtains regulatory approval, the commercial success may be impaired by the potential competition from other oncology agents, including TKIs.

STOCK RATING DEFINITIONS

Buy: The stock's return is expected to exceed 12.5% over the next twelve months.

Neutral: The stock's return is expected to be plus or minus 12.5% over the next twelve months.

Sell: The stock's return is expected to be negative 12.5% or more over the next twelve months.

Investment Ratings are determined by the ranges described above at the time of initiation of coverage, a change in risk, or a change in target price. At other times, the expected returns may fall outside of these ranges because of price movement and/or volatility. Such interim deviations from specified ranges will be permitted but will become subject to review.

RATINGS DISPERSION AND BANKING RELATIONSHIPS AS OF (December 7, 2023)

Rating	%	IB %
BUY	77.0	57.7
NEUTRAL	23.0	43.9
SELL	0.0	0.0

COMPANIES UNDER AYDIN'S COVERAGE

Acrivon Therapeutics, Inc. (ACRV)

Adverum Biotechnologies Inc. (ADVM)

Allarity Therapeutics Inc. (ALLR)
Anebulo Pharmaceuticals Inc. (ANEB)
Alterity Therapeutics Ltd. (ATHE)
Cognition Therapeutics Inc. (CGTX)
Coeptis Therapeutics Holdings Inc. (COEP)
NeuroBo Pharmaceuticals Inc. (NRBO)
NextCure, Inc. (NXTC)
Quoin Pharmaceuticals, Ltd. (QNRX)
Spruce Biosciences Inc. (SPRB)
Zura Bio Ltd. (ZURA)
Aileron Therapeutics Inc. (ALRN)
Annovis Bio, Inc. (ANVS)
Capricor Therapeutics Inc. (CAPR)
Compass Therapeutics Inc. (CMPX)
Corvus Pharmaceuticals Inc. (CRVS)
Nuvectis Pharma, Inc. (NVCT)
Palisade Bio, Inc. (PALI)
Sellas Life Sciences Group Inc. (SLS)
Tempest Therapeutics, Inc. (TPST)

COMPANY SPECIFIC DISCLOSURES

Ladenburg Thalmann & Co. Inc. expects to receive compensation for investment banking and/or advisory services from Allarity Therapeutics Inc. within the next 3 months.

Ladenburg Thalmann & Co. Inc. intends to seek compensation for investment banking and/or advisory services from Allarity Therapeutics Inc. within the next 3 months.

Ladenburg Thalmann & Co. Inc received compensation for investment banking services from Allarity Therapeutics Inc. within the past 12 months.

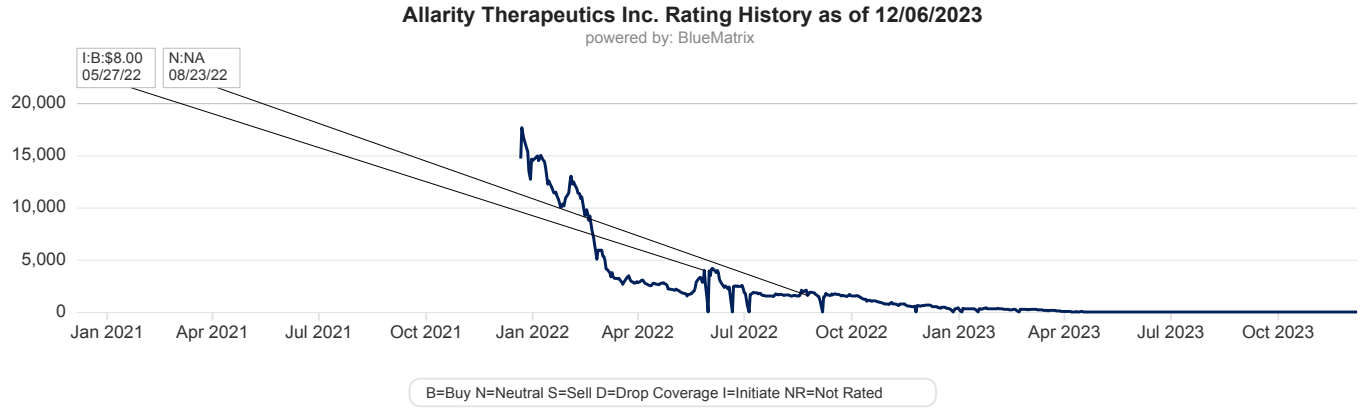
Ladenburg Thalmann & Co. Inc had an investment banking relationship with Allarity Therapeutics Inc. within the last 12 months.

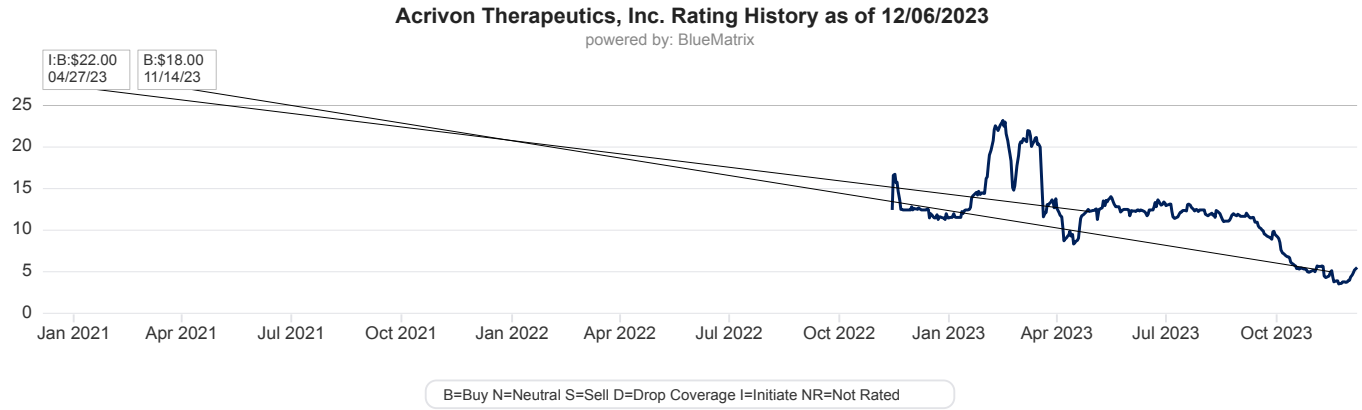
Ladenburg Thalmann & Co Inc. acted in an advisory capacity for Allarity Therapeutics Inc. in the last 12 months.

OTHER COMPANIES MENTIONED

Acrivon Therapeutics, Inc. (ACRV, $5.55, BUY)

INVESTMENT RATING AND PRICE TARGET HISTORY





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