



## Corporate Overview

September 6, 2018

Harold H. Shlevin, Ph.D.  
Chief Executive Officer

H.C. Wainwright Conference

NASDAQ: GALT  
[www.galectintherapeutics.com](http://www.galectintherapeutics.com)

## Forward-Looking Statements

This presentation contains, in addition to historical information, forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements relate to future events or future financial performance and use words such as “may,” “estimate,” “could,” “expect” and others. They are based on our current expectations and are subject to factors and uncertainties that could cause actual results to differ materially from those described in the statements.

These statements include those regarding potential therapeutic benefits of our drugs, expectations, plans and timelines related to our clinical trials, potential partnering opportunities and estimated spending for 2018 and beyond. Factors that could cause our actual performance to differ materially from those discussed in the forward-looking statements include, among others, our trials and supporting CMC information may not lead to positive outcomes or regulatory approval.

We may experience delays in our trials, which could include enrollment delays. Future phases or future clinical studies may not begin or produce positive results in a timely fashion, if at all, and could prove time consuming and costly. Plans regarding development, approval and marketing of any of our drugs are subject to change at any time based on the changing needs of our company as determined by management and regulatory agencies. Strategies and spending projections may change. We may be unsuccessful in developing partnerships with other companies or obtaining capital that would allow us to complete our clinical trials or further develop and/or fund any future studies or trials.

To date, we have incurred operating losses since our inception, and our future success may be impacted by our ability to manage costs and finance our continuing operations. For a discussion of additional factors impacting our business, see our Annual Report on Form 10-K for the year ended December 31, 2017, and our subsequent filings with the SEC. You should not place undue reliance on forward-looking statements. Although subsequent events may cause our views to change, we disclaim any obligation to update forward-looking statements.

# Galectin is a development stage biotech company with an experienced team



**Harold H. Shlevin, Ph.D., CEO and President**

- Over 34 years of relevant experience
- Solvay Pharmaceuticals, CEO
- CIBA Vision Ophthalmics (n/k/a Novartis Vision), SVP & co-founder
- Tikvah Therapeutics, Founder and CEO
- CIBA-Geigy Pharmaceuticals



**Adam Allgood, Pharm D., Clinical Development**

- Over 30 years experience in clinical development, medical affairs & regulatory processes.
- UCB Inc., Abbott Laboratories, Solvay Pharmaceuticals



**Eli Zomer, PhD, Pharm Development**

- Over 34 years of relevant experience: Koor Biotechnologies, Charm Sciences, Glycogenesis, HU Medical School (Jerusalem), and Harvard University



**Jack W. Callicut, CFO**

- Over 27 years of relevant experience
- Reach Health, CFO,
- Vystar Corporation, CFO,
- Corautus Genetics, Deloitte



**Rex Horton, Regulatory**

- Over 29 years of experience; Director Regulatory Affairs at Solvay Pharmaceuticals and Chelsea Therapeutics; Georgia Institute of Technology
- Head of regulation, quality assurance and manufacturing

# Galectin Therapeutics is developing treatments where the galectin-3 protein is implicated in disease

Clinical Focus		Stage of Development				
Drug	Indication	Discovery	Preclinical	Phase 1	Phase 2	Phase 3
Fibrosis						
GR-MD-02	NASH cirrhosis					
	NASH advanced fibrosis					
	Lung, Kidney, Cardiovascular fibrosis					
Cancer Immunotherapy (combination therapy)						
GR-MD-02 + Yervoy	Melanoma					
GR-MD-02 + Keytruda	Melanoma					
Plaque Psoriasis						
GR-MD-02	Moderate-severe					
New Galectin-3 Inhibitors						
Discovery program to identify subcutaneous and oral forms of carbohydrates and oral small molecules						

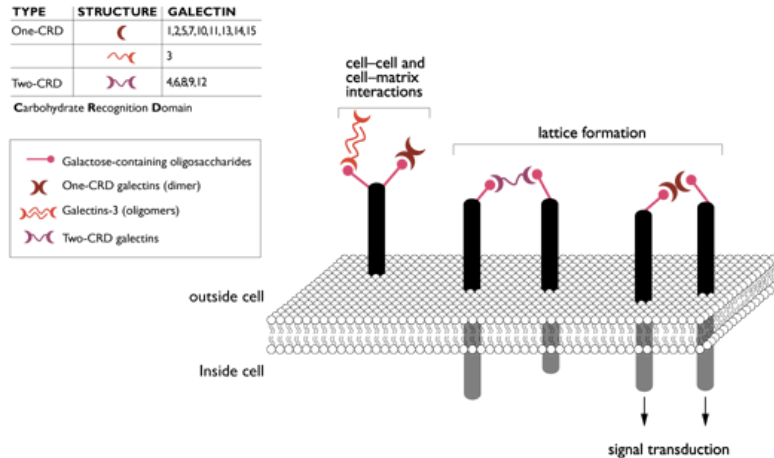
EoP2 FDA Guidance: Ready for Phase 3

**EoP2 FDA  
Guidance: Ready  
for Phase 3**

## Key Highlights

- **Clinically meaningful improvement shown in Phase 2 study in primary program, NASH cirrhosis without varices**
  - First randomized clinical trial of any drug to demonstrate statistically significant positive efficacy in compensated NASH cirrhosis without varices
  - Demonstrated efficacy in a population with a high degree of clinical unmet need with no available therapies and few in development
  - **Phase 3-ready after discussions with FDA**
- **Promising data in combination w/ market leading immuno-oncology agent, Keytruda**
  - Investigator-initiated phase 1b clinical trial of GR-MD-02 in combination with Keytruda in advanced melanoma and other malignancies
  - 2 complete responses and 3 partial responses seen out of 8 treated patients with advanced melanoma
- **Demonstrated activity in patients with moderate-to-severe plaque psoriasis**
  - All 5 patients treated in phase 2a open label trial showed improvement in disease activity by an average of 50%
- **GR-MD-02 is protected by a strong and robust IP portfolio of 46 granted and 50 pending patents across a broad group of human diseases through at least 2032**

# GR-MD-02 targets and disrupts the function of galectin-3, which plays a major role in diseases that involve scarring of organs



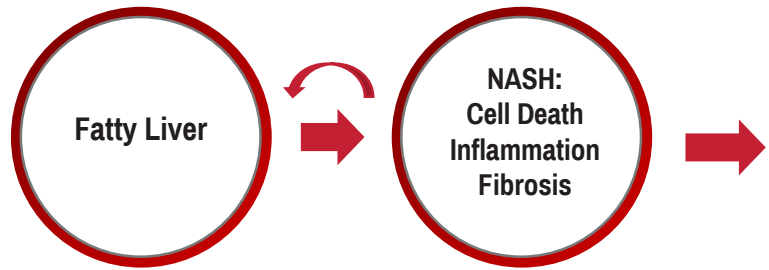
Galectin proteins' ability to dimerize creates the opportunity for galectins to link glycoproteins and form a lattice structure on the cellular surface and to promote cell-cell and cell-matrix interactions



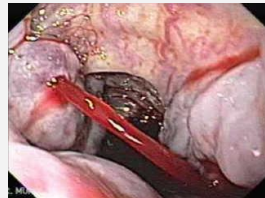
- GR-MD-02 is a complex carbohydrate drug that binds to galectin-3 proteins and disrupts their function
- Galectin-3 plays a major role in diseases that involve scarring of organs including fibrotic disorders of the liver, lung, kidney, heart, and vascular system
- Galectin-3 expression is up-regulated in established human fibrotic liver disease, and disruption of Galectin-3 can markedly reduce liver fibrosis
- For further details, please see our website

## Contents

- **NASH Cirrhosis**
- **Cancer Immunotherapy Combination**
- **Summary**

# There is currently no treatment for NASH cirrhosis, a progressive disease that can lead to significant mortality



Compensated Cirrhosis		Decompensated Cirrhosis
Stage 1	Stage 2	Stage 3 and 4
No Varices 	Varices Develop 	Bleeding, Ascites, Encephalopathy 
≥6	>10	Portal Pressure (mmHg) >12
Low one year mortality (1-3%)		~50% one year mortality

The majority of companies are focused on pre-cirrhotic NASH

Few companies with Phase 2/3 trials in NASH cirrhosis



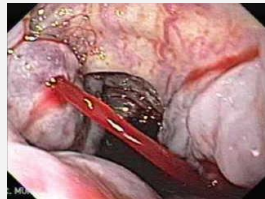
Unlike many companies in the NASH space, Galectin is focusing on the **compensated cirrhotic** patients

<sup>1</sup> Garcia-Tsao, G., Friedman, S., Iredale, J., Prinzani, M. *Hepatology*. 2010;51:14451449

# Patients with NASH cirrhosis without varices are at high risk for severe complications and have a high degree of unmet need

## Significance of Targeting NASH Cirrhosis without Varices:

- Once NASH progresses to cirrhosis, patients are at risk for severe complications, liver failure, and death and the condition is not reversible with lifestyle changes alone
- Presence/absence of varices is part of standard care for NASH patients and is easily done by endoscopy, and an important goal of treatment of patients with Stage 1 is to prevent progression to varices and complications
- The only currently available therapy for NASH cirrhosis is liver transplant when clinical progression is severe

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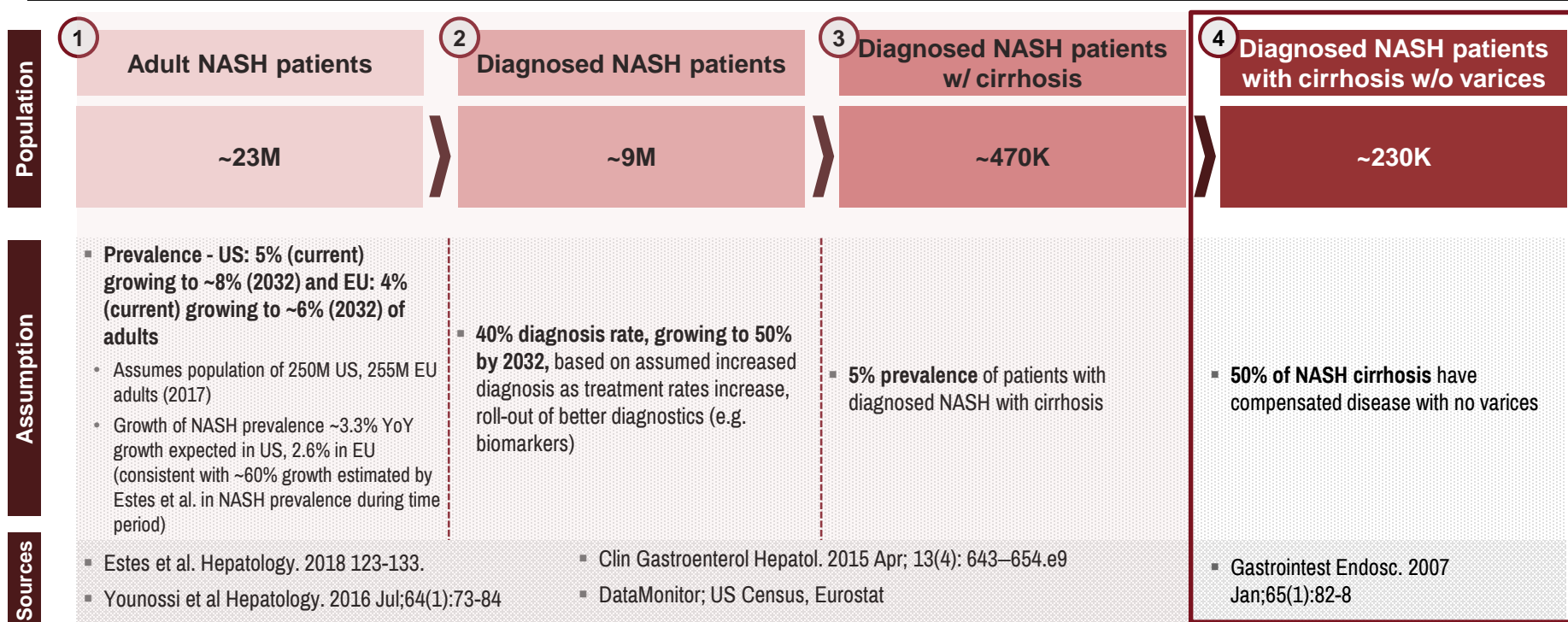
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# GR-MD-02 targets the ~230,000 NASH patients with cirrhosis and without varices

## Addressable Patient Population (2018 estimates, US and EU5)



# NASH-CX was a randomized, double-blind, placebo-controlled phase 2b clinical trial that enrolled 162 NASH cirrhosis patients<sup>1</sup>

## Phase 2b Trial Design

### Major Inclusion Criteria

- NASH cirrhosis (biopsy)
- HVP<sup>2</sup>  $\geq$  6 mmHg
- No cirrhosis complications
- No or small varices (50:50)

Endpoints		Baseline	Week 54
Primary Endpoint	Portal Pressure: HVP <sup>2</sup>	✓	✓
Secondary Endpoints	Liver Biopsy <sup>3</sup>	✓	✓
	Endoscopy (varices)	✓	✓
	Complications <sup>4</sup>	✓	✓

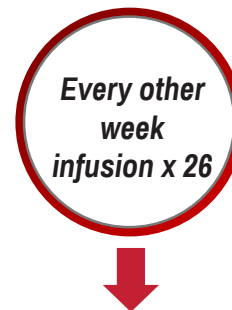
<sup>1</sup> Subjects were enrolled across 36 sites in the US

<sup>2</sup> HVP<sup>2</sup> = Hepatic Venous Pressure Gradient

<sup>3</sup> Histologic staging & quantitative morphometry for collagen

<sup>4</sup> Liver-related complications (varices/bleeding, ascites, hepatic encephalopathy, liver-related death, or transplant)

### Dosing and Administration

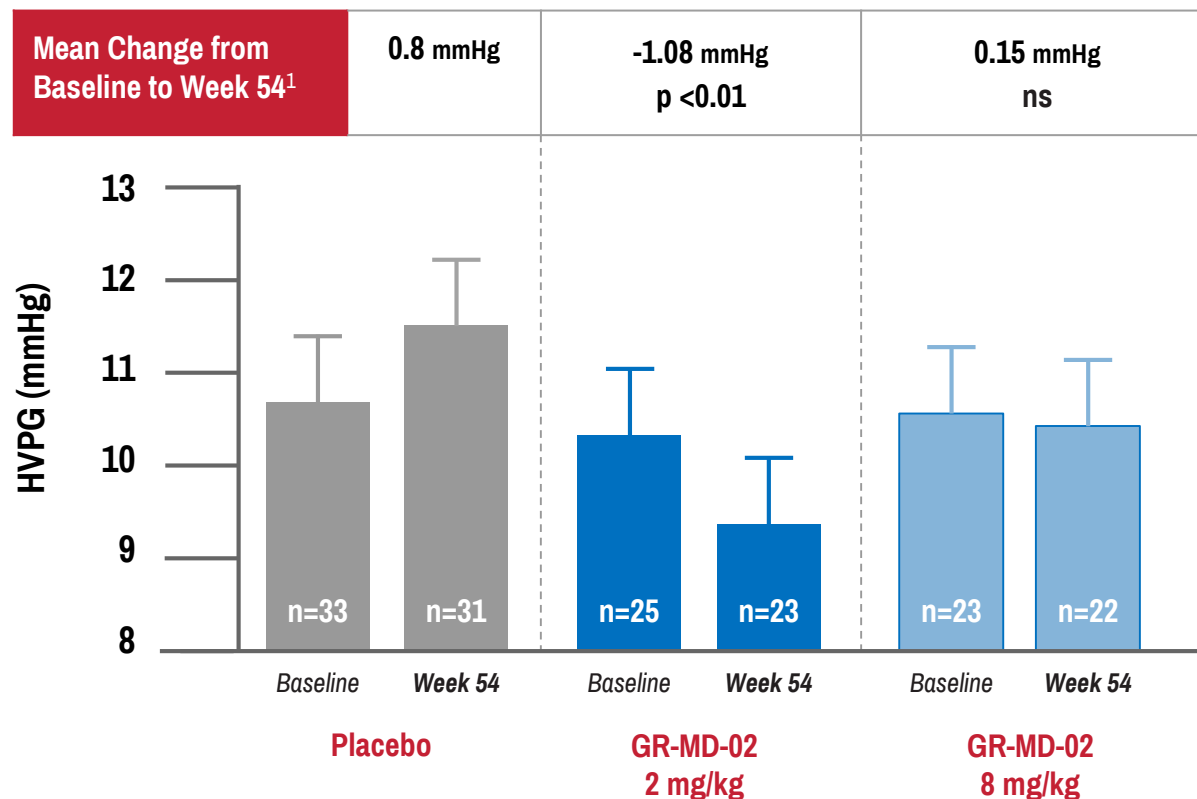


Treatment	#Patients
Placebo	54
GR-MD-02 2 mg/kg	54
GR-MD-02 8 mg/kg	54

**Additional trial data on website**

# The GR-MD-02 2 mg/kg group showed a statistically significant reduction in HVPG from baseline to week 54 for patients without varices

Statistically significant effect of 2 mg/kg dose on change in HVPG at baseline



<sup>1</sup>ITT with LOCF, ANCOVA with LSD

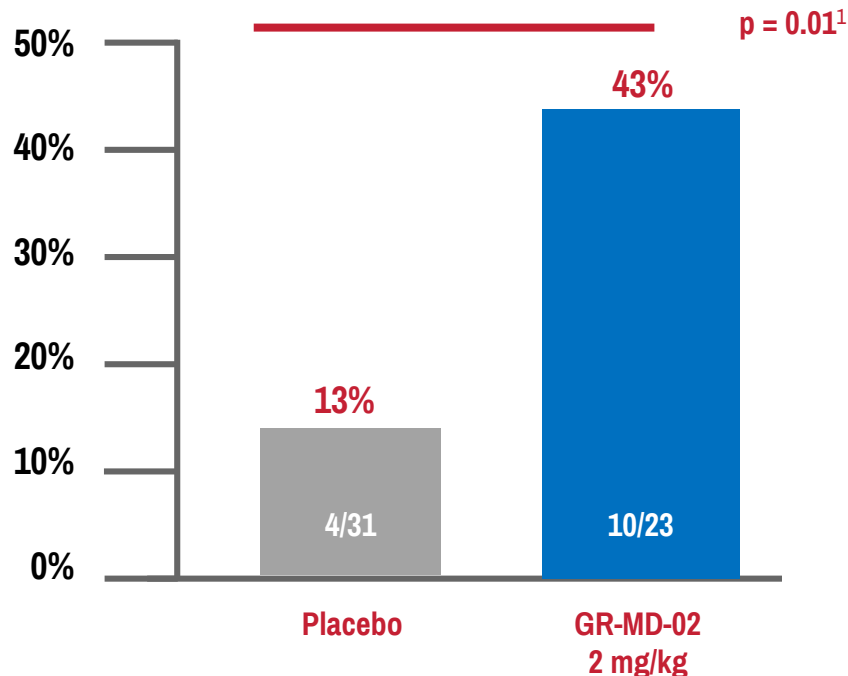
Mean ± SEM

# 43% of patients without varices in the GR-MD-02 2mg/kg group showed a $\geq 2$ mmHg and $\geq 20\%$ decrease from baseline compared to 13% in the placebo group

## Percentage of Patients Who Had a Clinically Relevant Reduction in HVPG With:

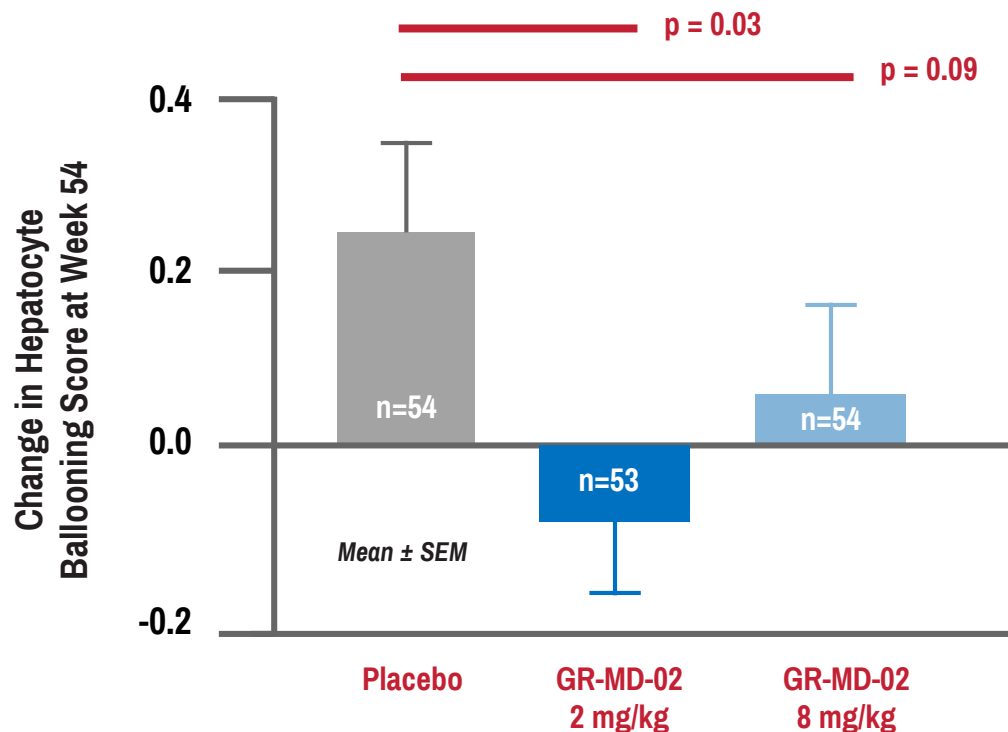
- $\geq 2$  mmHg Decrease From Baseline AND
- $\geq 20\%$  Decrease From Baseline

High bar to demonstrating efficacy that is contingent on clinically important reduction in HVPG from baseline



<sup>1</sup> Chi Square

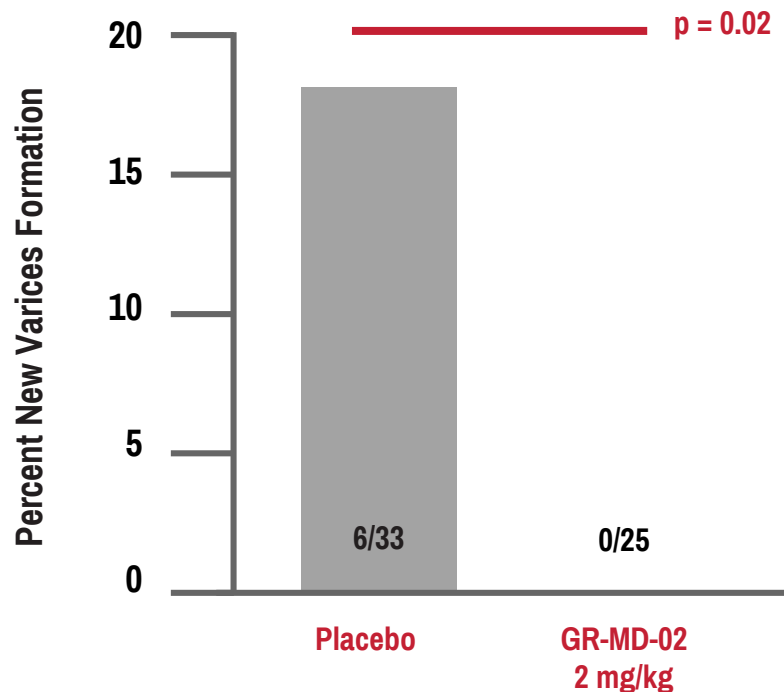
# Patients in the 2 mg/kg treatment group showed statistically significant improvement of liver cell death on liver biopsy<sup>1</sup>



<sup>1</sup>ITT population

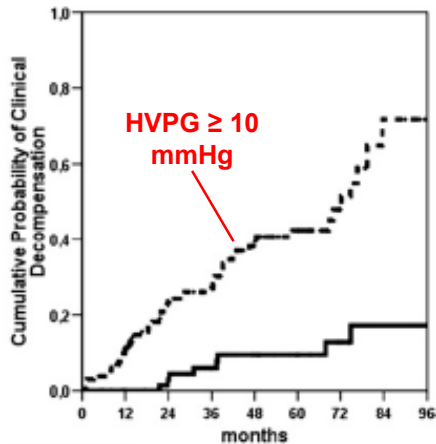
Ordinal Logistic Regression Analysis

**Significantly fewer new varices developed in treatment groups versus placebo, and no patients in the 2 mg/kg treatment group developed new varices**



<sup>1</sup> Chi Square

# GR-MD-02 has demonstrated efficacy in two clinically meaningful endpoints, where no current therapies exist



*Gastroenterology*, 2007;133:481–488

- **Portal hypertension (PH) is a critical, clinically important consequence of cirrhosis and responsible for the majority of associated complications**
  - Portal pressures of  $\geq 10$  mmHg are associated with increased risk of decompensation, varices, hepatocellular carcinoma, and 1-year mortality
  - For example, an HVPG  $\geq 10$  mmHg is associated with a 28% rate of varices development and 20% of first decompensation at two years
  - Patients with an HVPG  $< 10$  mmHg have only a 10% chance of developing clinical decompensation (over median follow-up of 4 years)
- **For patients with compensated cirrhosis and PH without varices, there are no specific therapies indicated for reducing PH and/ or directly treating the underlying liver disease**
  - Beta-blockers are efficacious in improving outcomes in patients with portal hypertension and varices, but likely do not prevent development of varices/ slow disease progression in early stage cirrhosis patients
  - As a result, clinical guidelines in the US and EU do not recommend the use of beta-blockers for the prevention of variceal formation
- **Further, Compensated cirrhosis patients with no major complications carry a median survival of >12 years, but compensated patients with varices have a worse prognosis (3.4% vs 1.0% one year mortality rates)**

## GR-MD-02 was safe and well-tolerated

- No differences between treatment groups in the number of patients with treatment emergent adverse events (AEs), grade 3/4 AEs, serious adverse events (SAE), or grade 3/4 laboratory abnormalities
- All but 2 SAEs were unrelated to study drug; 2 patients in 8 mg/kg group had SAEs that were possibly related to study drug <sup>1</sup>
- There was one death due to complications of a surgical procedure that was unrelated to study drug <sup>3</sup>
- There was a low patient dropout rate of 6% which suggests the drug was well tolerated and patients were adherent to the regimen (only one patient was removed from study for an AE possibly related to study drug <sup>2</sup>)

<sup>1</sup> Two SAEs were determined by the PI to be possibly related to study drug (transient ischemic attack and worsening of hyponatremia, both GR8); All others SAEs were felt to be unrelated to study drug

<sup>2</sup> *Possibly related to drug:* spasmodic cough (1); *Unrelated to study drug:* esophageal variceal bleeding (2), sepsis (1), pancreatitis (1)

<sup>3</sup> Pulmonary embolism following hernia repair surgery, judged to be unrelated to study drug



## Positive effects of GR-MD-02 shown in a subset of patients in the NASH-CX trial has allowed the company to reach its current Phase 3-ready development trajectory

*After incorporating advice and guidance from the FDA, Galectin announced on May 14, 2018 that the Company is proceeding with plans for a Phase 3 clinical trial program for GR-MD-02 in NASH cirrhosis*



### ***Trial Design***

#### ***Target Patient Population***

- *Patients with NASH cirrhosis without esophageal varices*

#### ***Primary Endpoint***

- *Progression to esophageal varices*  
*OR*  
• *Change in hepatic venous pressure gradient (HVPG)*

*Details of the Phase 3 clinical trial design, including projected timing and cost, will be announced once the planning phase has been completed*



## Summary of GR-MD-02 in NASH Cirrhosis

- **NASH-CX is the first clinical trial to show positive results in compensated NASH cirrhosis without esophageal varices**
  - Clinically meaningful effect in reducing portal pressure in a subgroup of patients
  - Improvement in liver cell death, a key component of NASH
  - Reduction in the development of new esophageal varices
  - Drug was safe and well-tolerated
  - Following leadership meeting with FDA in May 2018, determined to be Phase 3-ready
  - The presence of varices is part of STD care for patients and can easily be done with endoscopy
  - 50% of NASH patients do not have varices when diagnosed
  - Further awareness of NASH will lead to early diagnosis which will increase the number of patients without varices
- **These results will propel development program to the next stage**
  - Ongoing data analysis (pharmacokinetics of drug levels, serum biomarkers) and preparation of clinical study report
  - Proceeding with plans for a phase 3 clinical trial program

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# GR-MD-02 is believed to provide a novel mechanism of action with potentially important advantages in combination immunotherapy

## FOCUS ON IMMUNOTHERAPY

Galectin-3 secreted by cancer cells into the tumor microenvironment reduces the ability of immune system to fight cancer



## MARKET OPPORTUNITY

Even with newly approved drugs, a substantial unmet medical need remains in melanoma and multiple other cancers



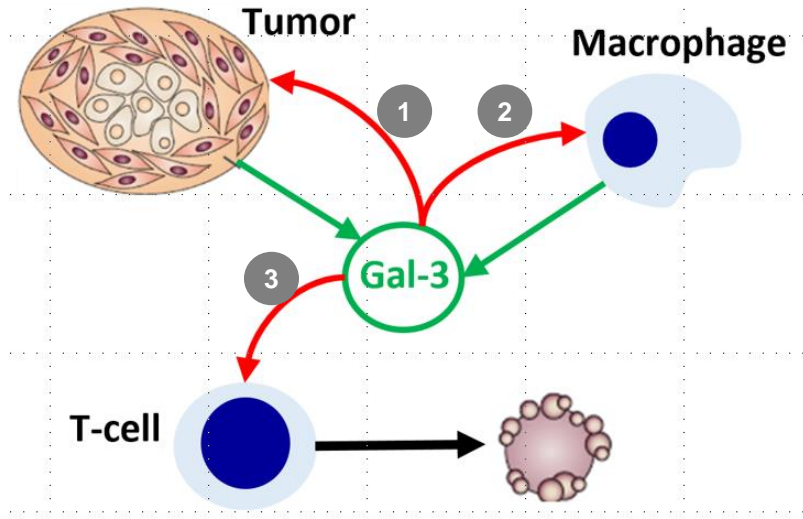
## CRITICAL COLLABORATION ESTABLISHED

- Providence Cancer Center in Portland, Oregon
- Performed preclinical studies showing efficacy of GR-MD-02 with checkpoint inhibitors
- Conducting and funding phase 1b clinical trial



**Additional information available on website**

# Gal-3 has an effect on cancer cells, macrophages, and T-cells in the tumor microenvironment



**Gal-3 is produced by both tumor cells and macrophages and has multiple effects, including:**

- 1 Promoting angiogenesis and metastasis of cancer cells
- 2 Promoting macrophage M2 polarization, increasing chemotaxis to recruit more macrophages, and enhancing gal-3 secretion
- 3 Reducing T cell receptor signaling promoting T-cell apoptosis (cell death) thereby blocking immune effects on tumor cells



## Phase 1B trial was initiated of GR-MD-02 plus pembrolizumab (KEYTRUDA) in patients with metastatic melanoma and other cancers

GR-MD-02 used in combination with a flat dose (200 mg) of pembrolizumab in the following patients:

- Metastatic melanoma with progression after other treatment including pembrolizumab alone
- Recurrent or metastatic HNSCC with progression after other treatment

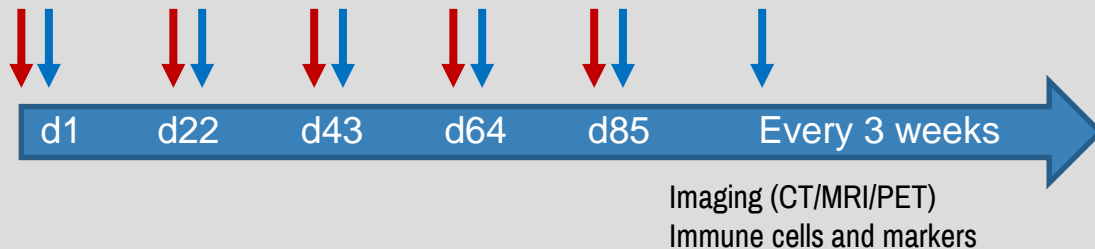
### GR-MD-02

2 mg/kg (5 patients; completed)

4 mg/kg (3 patients; completed)

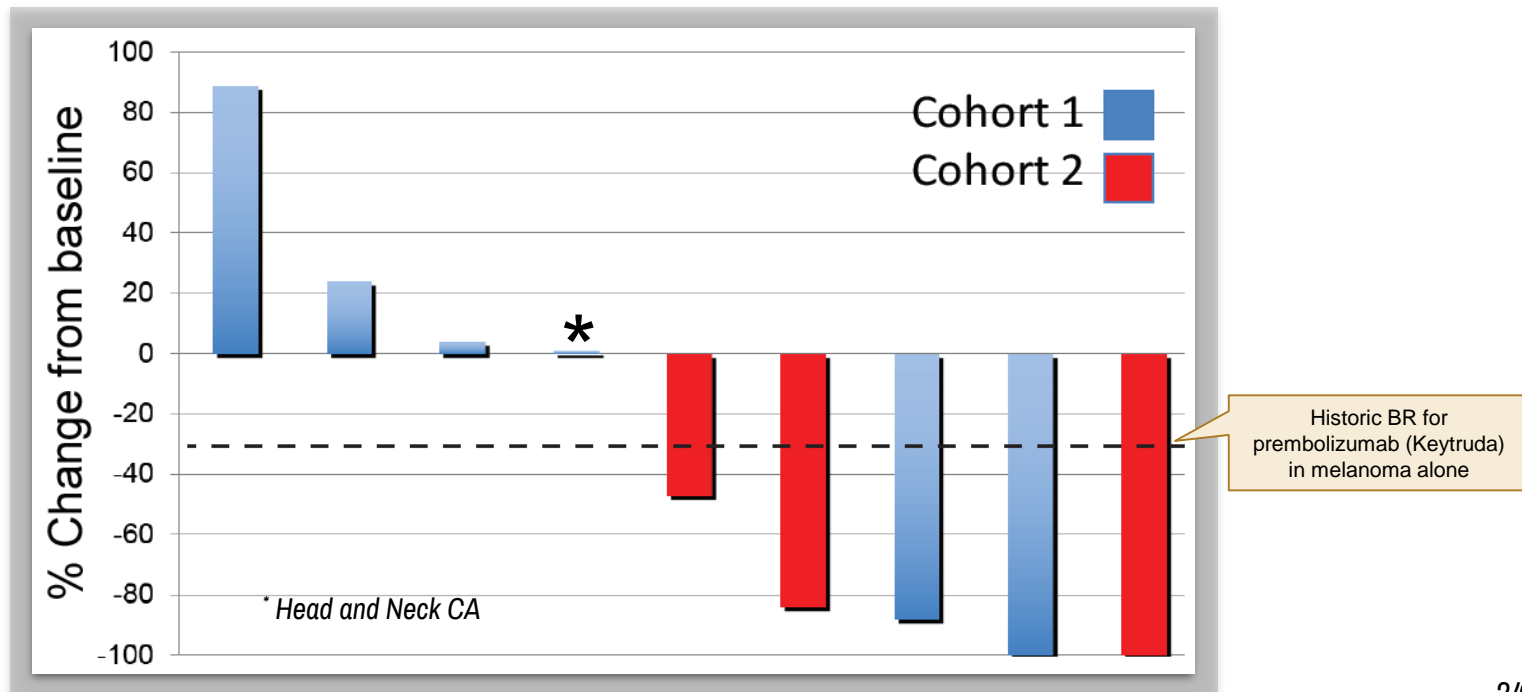
8 mg/kg (10 patients; underway)

### Pembrolizumab



## Response rate of 62.5% in melanoma for patients on GR-MD-02 plus pembrolizumab compares favorably to 33% best response of pembro alone

Waterfall plot of best objective clinical response post treatment (RECIST 1.1)





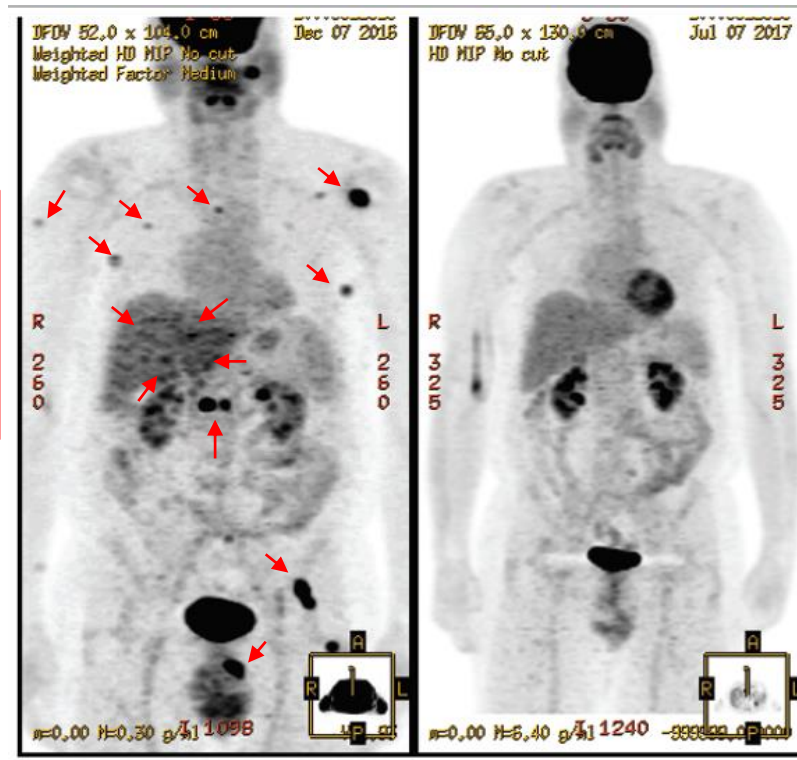
# Multiple PET scan detected melanoma deposits resolved

Example

Baseline

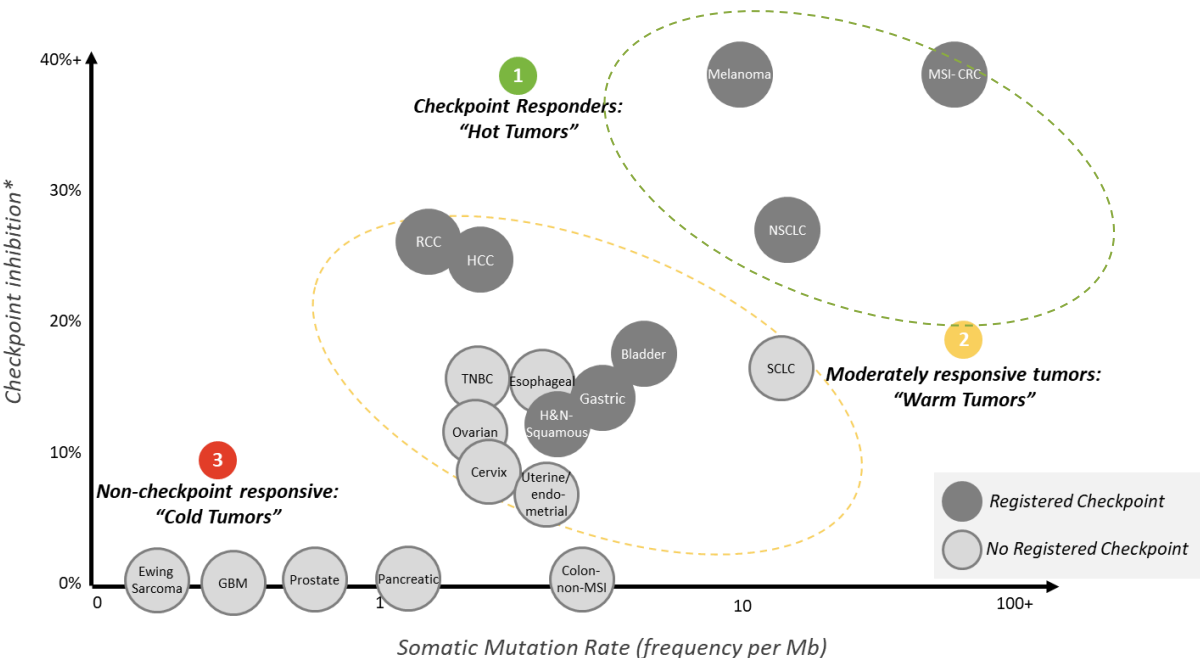
Day 169

Multiple tumors  
throughout body  
(red arrows)



All tumors resolved:  
normal contrast seen  
in heart, kidneys and  
bladder

# Potential additional indications in which to approach oncology market, beyond melanoma



1 **"Hot" Tumors:** highly immunogenic T cell responsive tumors with medium/ high somatic mutation rate

- GR-MD-02 could address needs of patients un-responsive or resistant to PD-1 treatment

2 **"Warm" Tumors:** tumors with moderate to low responses to PD-1 therapy

- Potential to deploy GR-MD-02 along side checkpoint inhibitors in tumors in which immunosuppressive pathways may limit checkpoint responses



## GR-MD-02 in Combination Cancer Immunotherapy

- **As a galectin-3 inhibitor, GR-MD-02 may represent a novel mechanism of action that is believed to be differentiated from the many other drugs being tested**
- **Potentially important advantages in combination immunotherapy**
  - Enhancement of activity with multiple agents and tumors (pre-clinical)
  - Potential novel and unique markers of anti-tumor activity
  - Encouraging enhancement of tumor response in phase 1 study
  - No increase adverse events when used in combination immunotherapy
  - Cost of manufacture is relatively inexpensive compared to biologics
- **Third patient cohort treated with GR-MD-02 8 mg/kg, with results anticipated in the near term**

**Additional information available on website**

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# Summary of Drug Development Program

- **GR-MD-02 is a novel antigalectin-3 drug that may modulate the immune system and may improve multiple diseases**
- **NASH Cirrhosis is a major unmet medical need with a large potential market**
  - Galectin-3 is important in development of NASH cirrhosis
  - NASH-CX trial is first and only positive phase 2 clinical data in a subset of patients without esophageal varices
  - GR-MD-02 was safe and well-tolerated and improved portal pressure, liver biopsy, and reduced development of varices
  - GALT is competitively well positioned in the industry
  - Following meeting with FDA in May 2018, determined to be phase 3-ready
- **Combination cancer immunotherapy**
  - Galectin-3 important in cancer immunity with encouraging early clinical results
  - Large potential to improve results of cancer immunotherapy
- **GR-MD-02 has shown activity in moderate-to-severe plaque psoriasis**
- **Sufficient funding for operations into mid-2019**

# Thank you for your attention

Harold Shlevin

[Shlevin@galectintherapeutics.com](mailto:Shlevin@galectintherapeutics.com)

678-620-3186