



**PharmAust**  
L I M I T E D

# ANNUAL GENERAL MEETING

NOV 10<sup>TH</sup> 2022

**ASX: PAA**

ACN 094 006 023



# AGENDA

INTRODUCTION

MONEPANTEL

EPICHEM

SUMMARY



## PET DOG PHASE 2 TRIAL: TREATMENT NAÏVE B CELL LYMPHOMA

CURRENT STATUS OF ENTIRE STUDY ENROLLED DOGS

(DAY 28 EVALUATION)

Study metric	# Dogs	Definition of data
# Dogs fully completed study	16	Fully completed - All study assessments complete, final grading confirmed PLUS blood testing for Monepantel completed. <b>Monepantel levels are in optimum range</b>
# Dogs partially completed study	9	Partially completed – All study assessments complete, final grading confirmed. Blood testing for Monepantel <b>NOT completed</b>
# Dogs fully completed study - suboptimal blood levels	5	All study assessments are complete, Final grading confirmed PLUS blood testing for Monepantel completed. Monepantel <b>levels in sub-optimum range</b>
# Dogs withdrawn from study	4	Dogs withdrawn from the study due to lack of compliance with study protocol (usually due to dosing dogs incorrectly or given therapy not allowed in protocol)
<b>Total # dogs enrolled to date</b>	<b>34</b>	

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REQUIRE 9 OF A FURTHER 21 DOGS WITH SD AT D28 TO MEET BAYESIAN OUTCOMES FOR SUCCESSFUL PHASE 2 TRIAL

## PET DOG PHASE 2 TRIAL: TREATMENT NAÏVE B CELL LYMPHOMA

RECIST OUTCOME FOR MONEPANTEL ALONE  
(16 COMPLETED DOGS)

Total # dogs fully completed to date	#Dogs SD Target nodes	# Dogs SD VCOG RECIST*
16	13	9

REQUIRE 9 OF A FURTHER 21 DOGS WITH SD AT D28 TO MEET BAYESIAN OUTCOMES FOR SUCCESSFUL PHASE 2 TRIAL



MPL trial participant

## PET DOG PHASE 2 TRIAL: TREATMENT NAÏVE B CELL LYMPHOMA EVALUATION DAY 28 VCOG RECIST VS OST (OVERALL SURVIVAL TIME)

### DAY 28 – VCOG RECIST (SD)

Study #	# Days (Monepantel monotherapy)	#Days (OST- Overall Survival Time)	Day 28 VCOG RECIST
002-002	28	<b>177</b>	<b>SD</b>
004-006	106	<b>144</b>	<b>SD</b>
004-005	42	<b>77</b>	<b>SD</b>
002-004	63	<b>191</b>	<b>SD</b>
005-005	71	<b>182</b>	<b>SD</b>
008-001	30	<b>38</b>	<b>SD</b>

### DAY 28 – VCOG RECIST (PD)

Study #	# Days (Monepantel monotherapy)	#Days (OST- Overall Survival Time)	Day 28 VCOG RECIST
005-002	43	<b>150</b>	<b>PD</b>
007-002	28	<b>191</b>	<b>PD</b>
005-006	32	<b>157</b>	<b>PD</b>
008-002	14	<b>28</b>	<b>PD</b>
008-003	>126	<b>&gt;126</b>	<b>PD</b>
005-007	32	<b>&gt;105</b>	<b>PD</b>



MPL trial participant

## PET DOG PHASE 3 TRIAL HYPOTHESIS: TREATMENT NAÏVE B CELL LYMPHOMA

- Preliminary efficacy demonstrating anticancer activity in current Bayesian designed Phase 2 clinical trial
  - On track for successful Phase 2 completion
  - Optimum plasma drug levels very close to being finalised
- Median OST ~ 150 days in combination with prednisolone = 2.5 -3.0 fold extension c.f. prednisolone alone
- Sufficient data to plan Phase 3 registration trial: +pred/ +doxorubicin warranted
  
- Very safe drug
- Independent manufacturing capabilities
- High quality of life, minimal side effects
- Pet Owner testimonials on PharmAust website:

<https://www.pharmaust.com/veterinary-trial-testimonials/>



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## WILL MONEPANTEL ALLOW GP VETS TO GROW A NEW CANINE ONCOLOGY MARKET SEGMENT?

Therapy	Median OST (days)	Cost (USD)	Side effects	Vet Responsible
None	40 days	0	Reducing QoL	GP
Prednisone	58	100	PU/PD, Soiling in house, increased appetite	GP/Oncologist
CHOP	300-360	8,000-12,000	GI disturbance, no contact with family members for a period, reduced appetite, fatigue	Oncologist

Therapy	Median OST (days)	Cost (USD)	Side effects	Vet Responsible
Monepantel/ Prednisone	150	TBC	Owner surveys from 8 dogs indicate excellent QoL score feedback. Usual Prednisone side effects have not been reported (Requires larger dataset to confirm)	GP and/or oncologist

## HOW DOES MONEPANTEL/PREDNISONE COMPARE TO NON-CHOP CANINE LYMPHOMA THERAPEUTIC OPTIONS?

Product Trade name	Active	Therapeutic target	Dosing	Survival metrics	Treatment side effects	User safety cautions	Commercial deal
Laverdia*	verdinexor	Canine lymphoma	Orally (2-3x/week)	Median TTP (29.5 days)	Anorexia, weight loss, GI upset, lethargy, elevated liver enzymes	No contact with pet body fluids for 3 days post treatment	Global licence for Laverdia *Total deal: \$ US 64.5M Upfront: \$US 19 M
Tanovea**	rabacfosidine	Canine lymphoma	IV (every 3 weeks)	Median PFS 134 days	Vomiting, diarrhoea, weight loss, anorexia, dermatopathy Grade 4 - neutropaenia	No contact with pet body fluids for 5 days post treatment	Development and commercialization agreement (Elanco /Vet DC) Value undisclosed
TBD	Monepantel/ Prednisone	Canine lymphoma	Oral (daily)	Median OST 150 days	Occasional Grade 1 weight loss and elevated liver enzymes	Keep out of reach of children.	

\* Laverdia FOI, [Dechra Pharmaceuticals PLC acquired Worldwide Rights to Verdinexor from Anivive Lifesciences, Inc. for \\$64.5 million. | MarketScreener](#)

\*\* Tanovea leaflet

## CANINE TREATMENT NAÏVE B CELL LYMPHOMA SUMMARY POINTS

- PD outcomes at D28 are **NOT** associated with poorer clinical outcomes over the life of the dog
- The 9 dogs listed in the “partially completed” are **NOT** the same 9 dogs outlined as required to meet the Bayesian design outcomes
- No matter the treatment protocol, most dogs with Lymphoma will die from Lymphoma
  - Stabilisation (as opposed to regression) of lymphoma with good QoL is still an excellent outcome



MPL trial participant

# epi**chem**

Fi Milner – General Manager

Anusha Aubert – Business Development Manager





***Our Formula. Your Success.***



## LEGACY

CERTIFIED ISO 9001 & ACCREDITED ISO/IEC 17025 & 17034

IP PROTECTION & CONFIDENTIALITY

## EXCEPTIONAL REPUTATION

GLOBALLY AND LOCALLY RECOGNISED

- Top Australian employer of PhD graduates
- National and state export award winners

CONSISTENT POSITIVE FEEDBACK

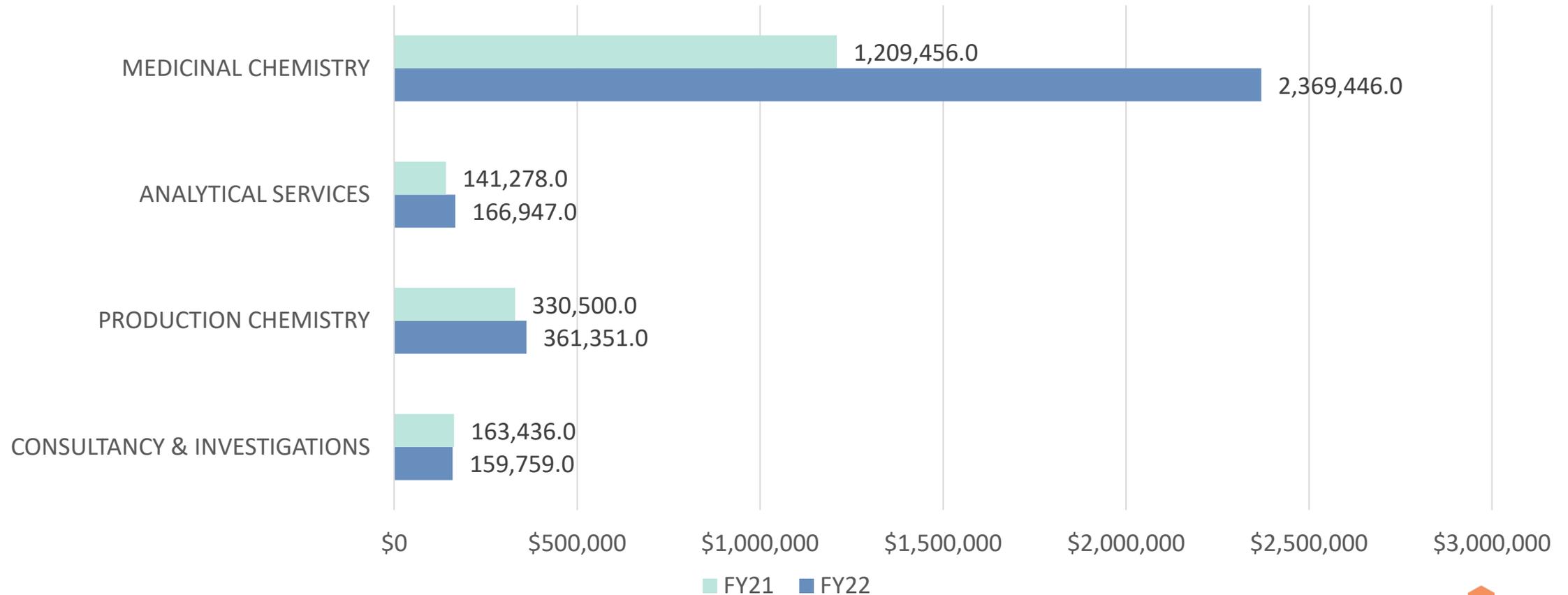
DIVERSITY OF OFFERINGS

## LONGEVITY

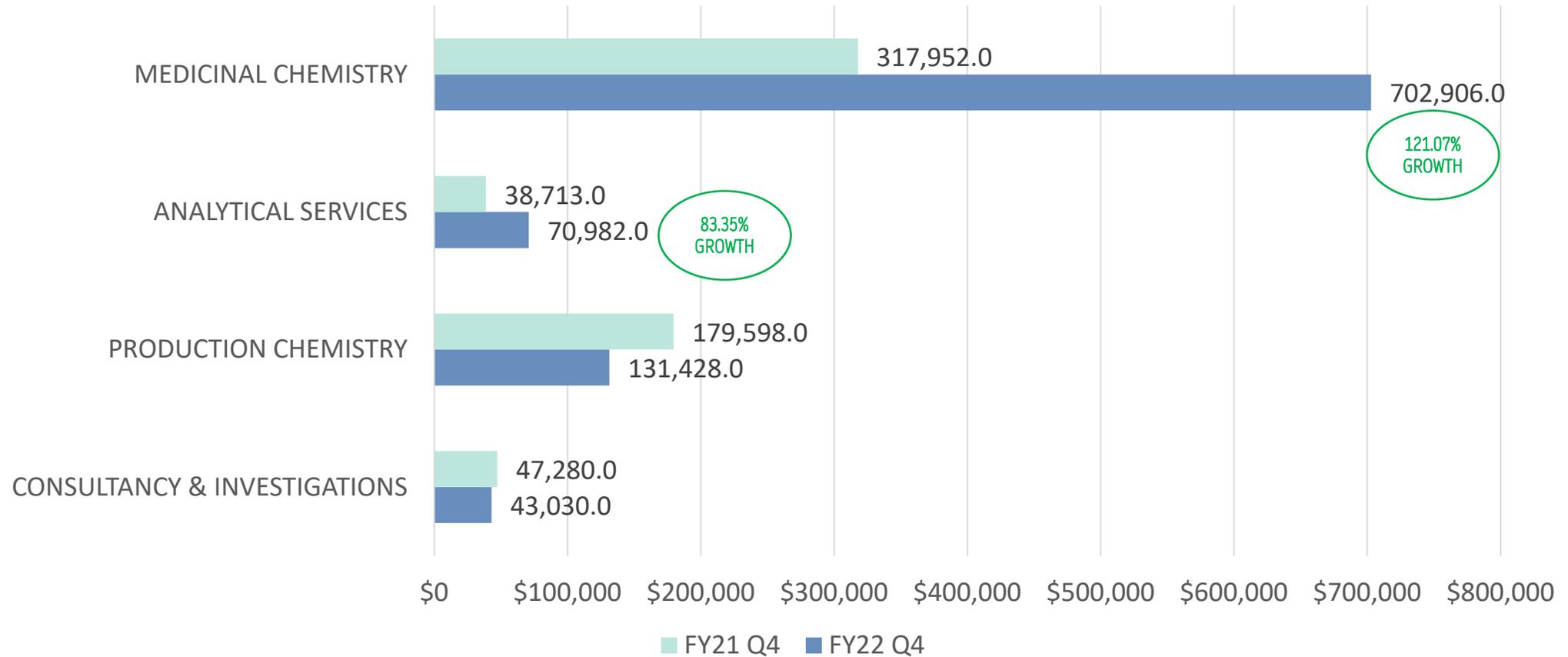
ALMOST 20 YEARS SUCCESS IN SERVING CLIENTS WORLDWIDE

IMPORTANCE OF TRUST

# FY21 VS FY22 REVENUE



# FY21 VS FY22 Q4 REVENUE



# SOME PROJECT INSIGHTS

## MEDICINAL, SYNTHETIC & PRODUCTION CHEMISTRY

Increase in diversity of projects and clients vs previous

International and local clients include:

- PYC
- Oncology One
- Remy Therapeutics

Pharmaceutical Reference Standards catalogue

## ANALYTICAL CHEMISTRY

Multiple projects and expanding portfolio

- PharmAust
- Chevron
- Wild Child

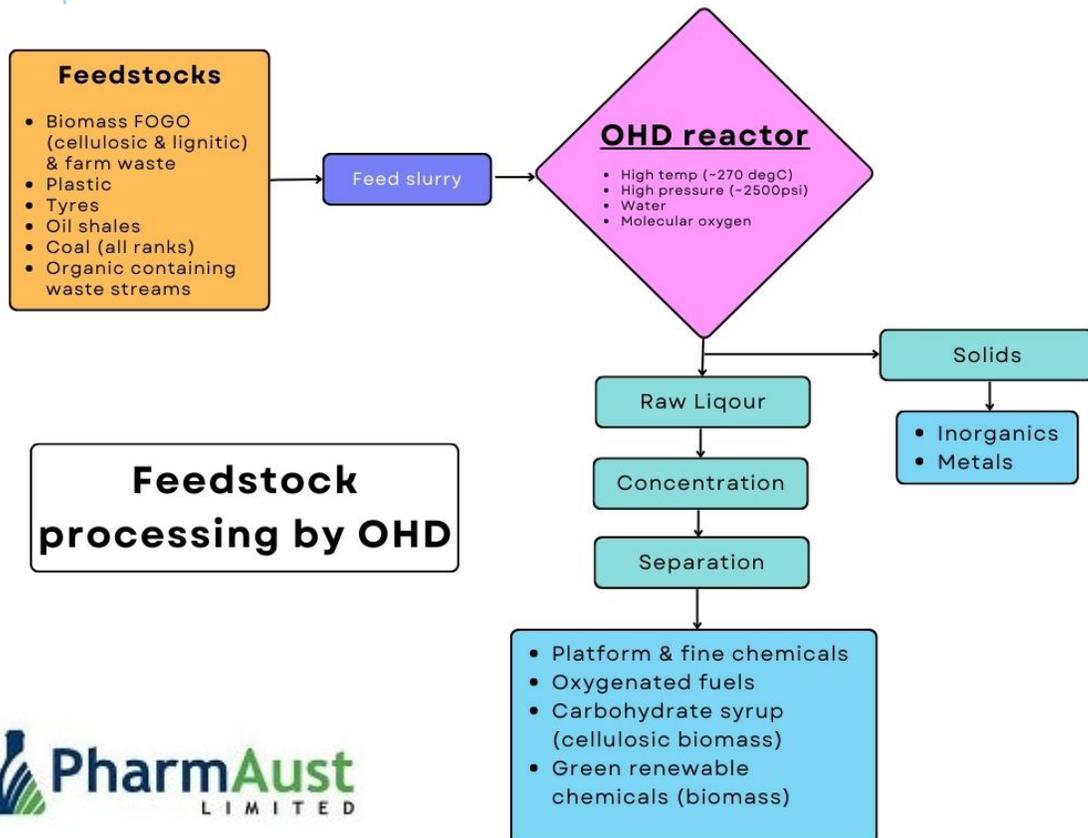


# MATERIAL SCIENCE

BUSINESS UPDATE

## OXIDATIVE HYDROTHERMAL DISSOLUTION (OHD)

CONTINUES TO BUILD MOMENTUM AND HIGH ENGAGEMENT WITH AN ARRAY OF CLIENTS ACROSS VARIOUS INDUSTRIES. NEAR COMPLETION OF A SIGNIFICANT PROJECT FOR SHELL/NERA, AIDED BY A NERA GRANT, SEES NOT ONLY PROMISING RESULTS (YET TO BE FINALISED), BUT ALSO PROMISES TO RAISE THE TIDE FOR FUTURE ENGAGEMENTS AT BOTH GOVERNMENT AND MAJOR PRIVATE COMPANY LEVELS.



❖ Shell/NERA grant project

❖ Collaboration with Curtin University on findings of e-waste grant of 2021

### CONVERSION POTENTIAL

- Coal into diesel or agricultural biostimulants
- Plastics into renewable fuels
- Rubber tyres into liquid fuels/valuable chemical products
- Trees into cellulosic ethanol &/or fine chemicals
- Leftover stock or crops into liquid fuel, cellulosic ethanol & agricultural biostimulants

# AREAS OF FOCUS

## GROWTH ACCELERATION

New Business Development Manager to maximise business opportunities and development including:

- Brand awareness
- Market presence
- Engaging with state government investment opportunities & focus in life sciences and biotech industry
- Collaborate with various stakeholders - academia, government & private sector

Maximise R&D & export capabilities

Maintain current client needs and leverage their networks where possible

Ensure agility within the business as contracts come and go



***Our Formula. Your Success.***

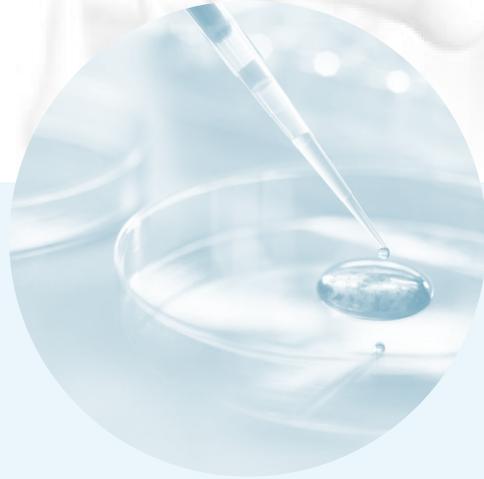
# SUMMARY

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Epichem is poised to capitalize on the global opportunities presented in life science's exponential growth through the variety of our services.

By utilizing our highly experienced team of chemists and leading edge laboratory equipment, we help organizations succeed. As our CEO says, "Efficiencies and growth will come from proactively transforming how we do business."





THANK YOU  
QUESTIONS?

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