James Molloy
(617) 283-5521, jmolloy@allianceg.com
Sales & Trading 888-543-4448

Ocuphire Pharma, Inc.

Buy

Estimate Change

Volatility: 5

FamyGen/Viatris partnership a signficant positive for OCUP and the expected launch of Nyxol too

(NASDAQ: OCUP)

Price	$2.49
52 Week Range	($1.78 - $5.50)
Price Target	**$25.00**
Market Cap (mil)	$49.00
Shares out (mil)	20.81
3-Mo Avg Vol	83,972
Cash per share	$2.35
Total Debt (mil)	NA
Debt/Equity	NA

Cash per share: Pro forma cash/share following recent Famy/ Viatris milestone

Revenues (thousands) $

Yr Dec	2021A	2022E		2023E	
	Actual	Curr	Prev	Curr	Prev
Mar	–	–	–	4E	–
Jun	–	–	–	4E	–
Sep	–	–	–	4E	–
Dec	–	–	–	4E	–
YEAR	1A	–	–	16E	–

EPS $

Yr Dec	2021A	2022E		2023E	
	Actual	Curr	Prev	Curr	Prev
Mar	(0.47)A	(0.35)A	–	(0.18)E	(0.36)E
Jun	(0.52)A	(0.25)A	–	(0.19)E	(0.35)E
Sep	(0.25)A	(0.22)A	(0.26)E	(0.19)E	(0.36)E
Dec	(0.35)A	(0.28)E	(0.29)E	(0.20)E	(0.38)E
YEAR	(1.54)A	(1.10)E	(1.15)E	(0.75)E	(1.45)E

OCUP recently announced their 3Q22 results highlighting and more importantly just yesterday morning the company held a call to announce the significant development and marketing partnership for Nyxol with FamyGen Life Sciences (Famy), which itself was also acquired by Viatris (VTRS, NR), a multi-national pharma company that will oversee the launches of Famy's newly acquired assets. The Famy deal brings in $35M in up-front milestones, covers all future development, regulatory, and sales expenses for Nyxol plus up to an additional $130M in (undisclosed) sales milestones, and a tiered double-digit sales royalty. The agreement covers Nyxol across all three of its indications: the reversal of mydriasis (RM), presbyopia, and night vision disturbances (NVD). This deal is really a wonderful deal for OCUP, in our opinion, and one that reflects the value that the Nyxol franchise brings to OCUP. Interestingly APX3330 was not included in the current deal, but it would seem most likely that VTRS is keeping a close eye on APX3330 as well, and should there be positive data from this ongoing Phase 2b trial (data expected 1H23) we believe an additional deal could be struck, if not the outright acquisition of OCUP altogether. OCUP is currently conducting pre-commercial activities for Nyxol, including planning a New Drug Application (NDA) for this quarter, followed by a potential launch in late 2H23-1H24. We are reiterating our Buy rating and our $25 price target based on a sum-of-the-parts, primarily based on our expectations for the company's NVD & presbyopia pipeline. We value OCUP's Nyxol for NVD at $11/share, Nyxol & low-dose pilocarpine (LDP) for presbyopia at $10/share, and Nyxol for RM at $2/share. We value the remaining assets and cash (end '23E) at $2/share for our $25 price target.

Global licensing agreement to cover the full development and commercialization of Nyxol. OCUP has entered into an exclusive license agreement with FamyGen Life Sciences Inc. which entails the development of Nyxol in all of its indications across the US, Europe, Japan, India, China, and other global markets. Under the terms of the agreement, OCUP will receive an upfront payment of $35M which should cover the pre-commercial activities of Nyxol needed for FDA approval, in addition to aiding in expediting the clinical trials set for in presbyopia and NVD. A milestone payment of $10M is also a possibility once FDA approval of Nyxol in RM is granted, with additional milestone payments set upon the approval of Nyxol's additional indications. The commercialization of Nyxol is also covered, as Viatris Inc, a global healthcare company, has agreed to commercialize Nyxol following each regulatory approval.

Ever closer to a potential approval of Nyxol with NDA submission expected by year-end. The most recent trial of Nyxol in RM is the MIRA-4 trial, which was completed early this year and established Nyxol's efficacy in reversing mydriasis in the 23 pediatric patients (aged 3-17) studied. Specifically, this trial showed that 64% of patients were able to return to baseline pupil diameter (PD) at 90 minutes after dilation, compared to solely 25% of placebo patients, all with no adverse events reported. This trial marks the gathering of the full dataset from all the MIRA trials which further showcase Nyxol's ability to significantly have treated patients return to ≤ 0.2 mm of their baseline PD at 90 minutes after dilation. With these positive findings, the company plans to submit an NDA with the full MIRA dataset by the end of the year, followed by a possible approval and launch in late 2023-early 2024.

Nyxol + LDP to be studied in upcoming VEGA presbyopia trials. Expanding the potential indications for Nyxol, OCUP is studying this candidate alone and in combination with 04% low-dose pilocarpine (LDP) as adjunctive therapy in presbyopia patients. The Phase 3 VEGA-2 is planned to be initiated this quarter, followed by a subsequent Phase 3 VEGA-3 trial and the 1-year safety LYRA-1 trial, both of which are planned to begin in 2023.

Recent KOL event highlights the potential for APX3330 as an oral treatment for DR/DME; ZETA-1 results in 1H23. A KOL event on oral APX3330 for DR/DME was held last month, with Dr. Peter Kaiser, Dr. Caroline Baumal, and Dr. David Lally in attendance. The KOLs highlighted the very real need for new treatment options needed in the DR/DME space as the current standard of care includes anti-vascular endothelial growth factor (VEGF) injections into the eye, though effective, are highly disliked by patients due to their mode of administration, leading to a majority of

patients forgoing treatment altogether. OCUP is researching their APX3330 candidate, which works by blocking reduction-oxidation effector factor 1 (Ref-1), in turn lessening neovascularization and restoring vision. OCUP may serve as a potential alternative to anti-VEGF injections as its mode of administration is an oral tablet, making it vastly less invasive which should aid in patient compliance in obtaining ongoing treatment for their diagnosis. APX3330 is also being studied in the Phase 2b ZETA-1 trial in 103 DR patients, with topline results expected in early 2023.

Maintain Buy rating, $25 price target. Our price target is based on a sum-of-the-parts, primarily based on our expectations for the company's NVD & presbyopia pipeline. We value OCUP's Nyxol for NVD at $11/share, Nyxol & low-dose pilocarpine for presbyopia at $10/share, and Nyxol for RM at $2/share. We value the remaining assets and cash (end '23E) at $2/share for our $25 price target.

Valuation:

We value OCUP at $25/share based primarily on our expectations for Nyxol for NVD and the combination of Nyxol & low-dose pilocarpine for Presbyopia, as well as Nyxol of RM. We model in that Nyxol is approved and launched for RM in 2024 and NVD in 2025 with sales reaching $625M for NVD and $185M for RM by year 2030. We model in OCUP receiving a 16% royalty on both. We place a 9x multiple on the royalties for both and discount each back 7 years at 15% (for NVD) and 20% (for RM) for our valuations of $11/share for NVD and $2/share for RM. We anticipate that the combination of Nyxol & low-dose pilocarpine for Presbyopia reaches blockbuster sales levels, and we model in this compound approved & launched in 2025 and reaching $1.25B in sales by 2030. We model in OCUP receiving a 15% royalty on Presbyopia sales. We place a 9x multiple on these royalties discounted back 7 years at 25% for our $10/share valuation for Presbyopia. We value OCUP's additional compounds & technology including APX3330 for DR & DME, as well as APX2009 and APX2014 (2nd generation DR & DME compounds) as well as cash (at the end of 2023E) at $2/share for our sum-of-the-parts valuation of $25/share.

Risks to achievement of target price:

Exogenous events could impact our outlook. We believe pharmaceutical companies have the least control over competitive, political, and regulatory risks. Although we have incorporated competitive assumptions into our forecasts, there may be other risks beyond the scope of our analysis. Changes in the drug reimbursement system, as well as any political or regulatory amendments, may significantly influence the earnings power of these companies.

Actual clinical results and the FDA's conclusions may deviate from expectations. Many of our assumptions are based on a review of incomplete clinical trial data available in the public domain. Often, our conclusions are drawn from early-stage data, which may not be reflected by pivotal studies. Furthermore, the FDA's conclusions may not coincide with our own, materially changing our revenue and earnings assumptions.

Compliance issues, product recalls, and other mandates by regulatory authorities could materially change our expectations. Regulatory compliance issues, ranging from accounting irregularities to defective manufacturing practices, could materially change our assumptions and earnings outlook. Unanticipated product recalls and labeling changes could also have adverse consequences on our earnings assumptions.

Legal risks could lead to additional liabilities and revenue loss. In addition to the expenses incurred by patent challenges, product liability and other legal suits could occur and lead to additional liabilities and revenue loss, which could substantially change our financial assumptions.

Raising additional capital may cause dilution. If the company requires additional funding through raises in equity offerings, or similar financial instruments shareholders' ownership interests will be diluted, and the terms of these new securities may include liquidation or other preferences that adversely affect shareholders' rights.

COVID-19 Impact. If the ongoing economic & social disruption of the response to the COVID-19 virus continues that could materially impact the company's ability to conduct clinical trials or regular business.

Please see the company's SEC filings for a more comprehensive discussion of potential risks.

Figure 1. Sum-of-the-Parts

Sum-of-the-parts valuation		
Segment	Valuation (000's)	Per share value
Night Vision Disturbances	$353,819	$11.00
Presbyopia	$327,166	$10.00
Reversal of Mydriasis	$74,736	$2.00
Cash (end-'23E) & other tech	$71,438	$2.00
SUM	$827,159	**$25.00**
Fully diluted shares out '23E (000)		32,761

Source: AGP estimates

Figure 2. Variance analysis

Ocuphire Pharma
Variance analysis

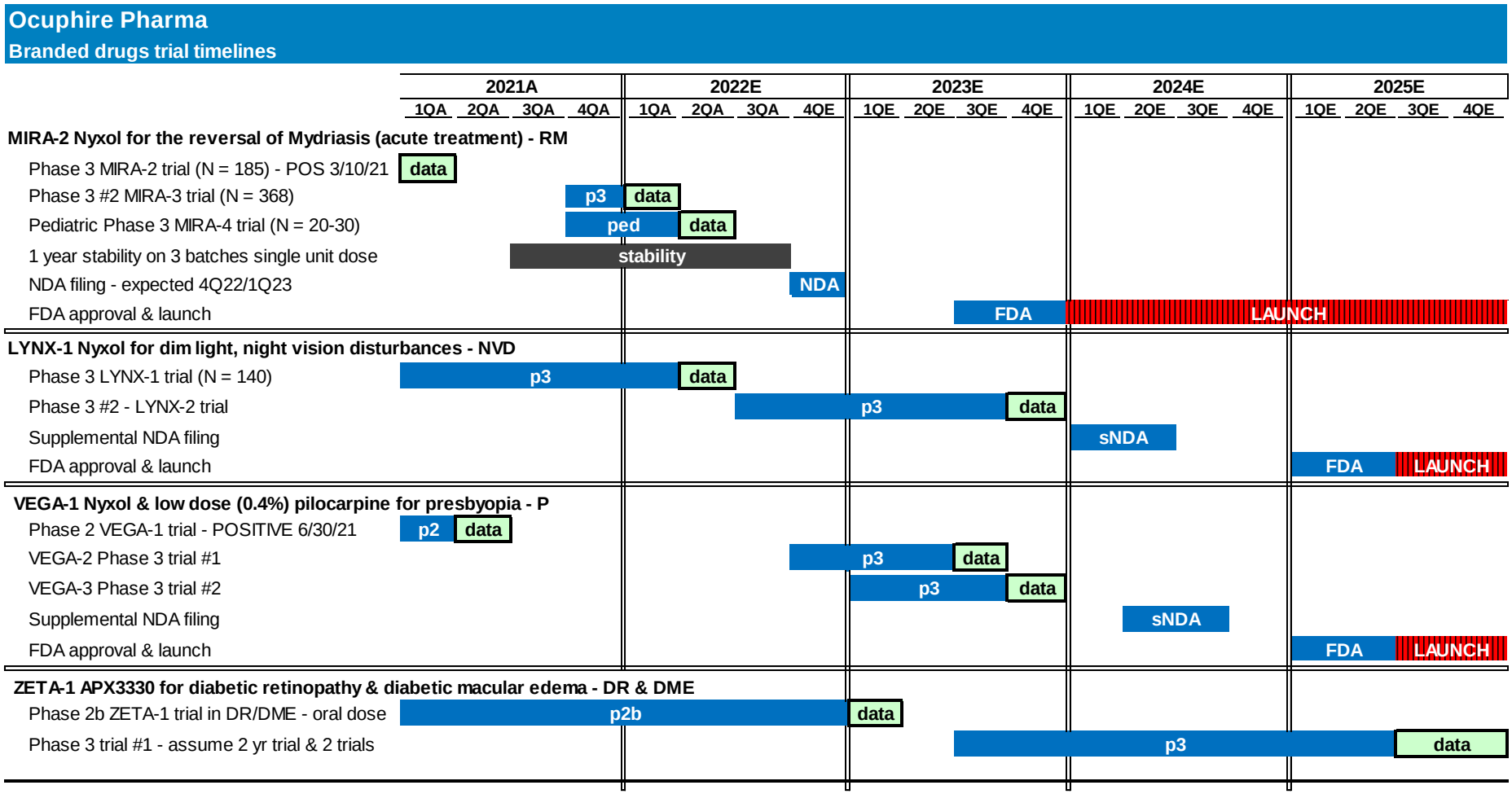
(000's)

	3Q21A	3Q22A	3Q22E	Variance	% Y/Y
General & Administration	1,595	1,703	2,000	(297)	7%
Research & development	3,126	2,835	3,500	(665)	-9%
Operating Income (loss)	**(4,232)**	**(4,538)**	**(5,500)**	**962**	**7%**
Interest inc/(exp), net	0	0	(5)	5	NM
other inc / fin expense	2	7	0	7	250%
Adj Net income	**(4,230)**	**(4,531)**	**(5,505)**	**974**	**7%**
Net income - as reported	**0**				
Wgtd Avg Shares (000)	16,925	20,498	21,003	(504)	21%
Adjusted EPS	**($0.25)**	**($0.22)**	**($0.26)**	**$0.04**	**-12%**

Source: AGP estimates

.

Figure 3: Potential clinical trial timelines



Source: Company reports; AGP estimates

Figure 4: Quarterly Income Statement

Ocuphire Pharma
Quarterly income statement

($000 except per share)	2021A 1QA	2021A 2QA	2021A 3QA	2021A 4QA	2021A Year	2022E 1QA	2022E 2QA	2022E 3QA	2022E 4QE	2022E Year
Revenues										
Collaboration revenue		$100	$489		$589					
Total revenues		**$100**	**$489**		**$589**					
Expenses										
General & Administration	1,704	3,408	1,595	1,414	8,121	1,736	1,776	1,703	2,250	7,465
Research & development	3,482	3,829	3,126	4,736	15,173	4,772	3,162	2,835	3,750	14,519
Total operating expenses	5,186	7,237	4,721	6,150	23,294	6,508	4,938	4,538	6,000	21,984
Income (loss) from ops	**(5,186)**	**(7,137)**	**(4,232)**	**(6,150)**	**(22,705)**	**(6,508)**	**(4,938)**	**(4,538)**	**(6,000)**	**(21,984)**
Interest inc/(exp), net				(2)	(2)	(5)	(4)	0	(5)	(14)
other inc / fin expense	1	1	2	(161)	(157)	(82)	15	7		(60)
Adj. Net income (loss)	**(5,185)**	**(7,136)**	**(4,230)**	**(6,313)**	**(22,864)**	**(6,595)**	**(4,927)**	**(4,531)**	**(6,005)**	**(22,058)**
Non-cash & 1x expenses										
FV change deriv liability	(33,829)				(33,829)					
Note extinguishment										
NI (loss) as reported	**(39,014)**				**(56,693)**					
Adj EPS	**($0.47)**	**($0.52)**	**($0.25)**	**($0.35)**	**($1.54)**	**($0.35)**	**($0.25)**	**($0.22)**	**($0.28)**	**($1.10)**
EPS as reported	**($3.57)**				**($3.82)**					
Weighted avg. shares (000)	10,924	13,609	16,925	17,855	14,853	18,888	19,503	20,498	21,248	20,034
Fully diluted shares (000)	20,188	22,974	26,353	27,115	24,157	28,863	29,648	30,782	31,448	30,185

Source: Company reports; AGP estimates

Figure 5: Annual Income Statement

Ocuphire Pharma
Annual income statement

($000 except per share)	2021A	2022E	2023E	2024E	2025E	Comments
Revenues						
Nyxol for RM royalties				$516	$3,924	Royalties from Famy
NVD royalties					1,113	Royalties from Famy
Presbyopia royalties					300	Royalties from Famy
Collaboration revenue			$16,250	15,750	15,750	Dev. exp from Famy here
Total revenues			**$16,250**	**$16,266**	**$21,087**	
Expenses						
General & Administration	8,121	7,465	14,000	16,500	16,500	Increasing staffing
Research & development	15,173	14,519	19,250	17,000	17,000	Covered by Famy
Total operating expenses	23,294	21,984	33,250	33,500	33,500	
Inc (loss) from ops	**(22,705)**	**(21,984)**	**(17,000)**	**(17,234)**	**(12,413)**	
Interest income	(2)	(14)	0	0	0	
other inc / fin expense	(157)	(60)	0	0	0	
Net income (loss)	**(22,864)**	**(22,058)**	**(17,000)**	**(17,234)**	**(12,413)**	
Non-cash & 1x expenses						
FV change deriv liability	(33,829)					
Note extinguishment						
NI (loss) as reported	**(56,693)**					Non-cash expenses
Adj EPS	**($1.54)**	**($1.10)**	**($0.75)**	**($0.70)**	**($0.45)**	
EPS as reported	**($3.82)**					
Weighted avg. shares (000)	14,853	20,034	22,561	24,623	27,623	
Fully diluted shares (000)	24,157	30,185	32,761	35,123	38,123	
Cash & equivalents	**$24,534**	**$43,456**	**$39,448**	**$26,219**	**$18,061**	$35M Fami up-front 4Q22

Source: Company reports; AGP estimates

Important Research Disclosures

Distribution of Ratings/IB Services

			IB Serv./Past 12 Mos.	
Rating	**Count**	**Percent**	**Count**	**Percent**
BUY [BUY]	114	83.21	4	3.51
HOLD [NEUTRAL]	16	11.68	2	12.50
SELL [SELL]	1	0.73	0	0
NOT RATED [NR]	6	4.38	1	16.67
UNDER REVIEW [UR]	0	0.00	0	0

Disclosures

"**Firm**" used in the this section of the report entitled "**Disclosures**" refers to **A.G.P. / Alliance Global Partners** or **Euro Pacific Capital, a division of A.G.P. / Alliance Global Partners**. The Firm expects to receive or intends to seek compensation for investment banking services from all companies under research coverage within the next three months. The Firm or its officers, employees or affiliates, other than the research analyst authoring this report and his/her supervisor, may execute transactions in securities mentioned in this report that may not be consistent with the report's conclusions. Sources referenced in this report: The information and statistics in this report have been obtained from sources we believe are reliable but we do not warrant their accurance or completeness.

Regulation Analyst Certification ("Reg AC") —

The views expressed in this report (which include the actual rating assigned to the company as well as the analytical substance and tone of the report) accurately reflect the personal views of the analyst(s) covering the subject securities. An analyst's sector is the universe of companies for which the analyst provides research coverage. Accordingly, the rating assigned to a particular stock represents solely the analyst's view of how that stock will perform over the next 12 months relative to the analyst's sector average.

Furthermore, in accordance with FINRA Rules 2711, 2241, and their amendments related to disclosure of conflicts of interest, the analyst preparing this report certifies:

- The analyst or member of the analyst's household does not have a financial interest in the company that is the subject of this report, including a position in the debt or equity of the company, without limitation, whether it consists of any option, right, warrant, future, long or short position.
- The analyst or member of the analyst's household does not serve as officer, director or advisory board member of the company that is the subject of this report.
- The analyst has not received any compensation from the subject company or from investment banking revenues, directly or indirectly, for preparing this report.
- The report discloses all material conflicts of interest related to the analyst, the member firm, and the subject company that are known at the time of publishing this report.

Ratings

Buy: Expected to materially outperform sector average over 12 months and indicates total return of at least 10% over the next 12 months.

Neutral: Returns expected to be in line with sector average over 12 months and indicates total return between negative 10% and 10% over the next 12 months.

Sell: Returns expected to be materially below sector average over 12 months and indicates total price decline of at least 10% over the next 12 months.

Not Rated: We have not established a rating on the stock.

Under Review: The rating will be updated soon pending information disclosed from a near-term news event.

Volatility Index

1 (Low): Little to no sharp movement in stock price in a 12 month period

2 (Low to medium): Modest changes in stock price in a 12 month period

3 (Medium): Average fluctuation in stock price in a 12 month period

4 (Medium to High): Higher than average changes in stock price in a 12 month period

5 (High): Extremely sharp movements in stock price in a 12 month period

All financial information is taken from company disclosures and presentations (including Form 10Q, 10K and 8K filings and other public announcements), unless otherwise noted. Any prices or quotations contained herein are indicative only and are not a commitment by A.G.P. / Alliance Global Partners to trade at any price.

If A.G.P. / Alliance Global Partners acts in a principal capacity with respect to the instruments mentioned herein it will be disclosed in the previous section of this report entitled “Disclosures.” In the event that A.G.P. / Alliance Global Partners does act in a principal capacity, the commentary is therefore not independent from the proprietary interests of A.G.P. / Alliance Global Partners, which interests may conflict with your interests. Opinions expressed herein may differ from the opinions expressed by other divisions and/or business units of A.G.P. / Alliance Global Partners. The Firm does not undertake any obligation to update this material. This material is current as of the indicated date and as of the time it was sent to you. This material was prepared from information believed to be reliable, but A.G.P. / Alliance Global Partners makes no representations or warranties as to its accuracy or completeness.

This communication and the information contained herein is neither an offer to buy or sell nor a solicitation of an offer to buy or sell any security or instrument or to participate in any particular trading strategy.

This report should not be used as a complete analysis of the company, industry or security discussed in the report. Additional information is available upon request. Any opinions or estimates in this report are subject to change without notice. An investment in the stock may involve risks and uncertainties that could cause actual results to differ materially from the forward-looking statements. Additionally, an investment in the stock may involve a high degree of risk and may not be suitable for all investors. No part of this report may be reproduced without the express written permission of A.G.P. / Alliance Global Partners, member FINRA/SIPC.