

## Repros Therapeutics (RPRX - \$ 0.90)

### FDA Meeting for Enclomiphene (Androxal) CRL Discussion and Possible Clinical Path Forward

Yesterday after market close, RPRX hosted a conference call and updated investors on a recent FDA meeting discussing Androxal development and possible clinical path forward for secondary hypogonadism (2<sup>nd</sup> HG) in the U.S.

- Details.** Key takeaways from the call include: 1) given that the agency has indicated that the bioanalytical method used for the pivotal clinical studies must be validated prospectively instead of retrospectively at each clinical site, the FDA is not likely to re-accept the current clinical data package for reviewing; 2) RPRX decided not to pursue a dispute resolution with the FDA to resolve this issue due its long process (up to two years) and potential to sour the relationship with the FDA; 3) RPRX is conducting a Phase II trial evaluating Androxal plus diet and exercise (D/E) vs. D/E alone in 2<sup>nd</sup> HG patients to potentially demonstrate that the drug could accelerate the recovery of the wellbeing of patients. The study is about to complete patient enrollment and it will include assessments of 3, 6, and 12-months; 4) most importantly, in our opinion, the FDA is planning to conduct an AdCom meeting potentially in 2H16 to examine the potential treatment or management of 2<sup>nd</sup> HG patients; 5) RPRX will submit MAA in Europe for Androxal as a potential 2<sup>nd</sup> HG therapy in the near future; and 6) if all events are positive, RPRX plans to out-license Androxal to partner for commercial development.
- Implication.** We view this update as a positive initial step for advancing the Androxal program despite many remaining uncertainties. Among them, we believe the most important factor would be the FDA AdCom discussions on how to potentially manage 2<sup>nd</sup> HG patients medically, including the definition of these patients. The outcome from the meeting could potentially guide the future drug development in this space. Further, we also view the outcome of the upcoming Phase II clinical study would also play a critical role in the potential of Androxal in the U.S. Together, we believe the majority of RPRX share value remains on the potential of Proellex and anticipate more visibilities of Androxal in the future for evaluating its value in the U.S.
- Action.** We are reiterating our Buy rating, and target price of \$3.50 to reflect the promising Proellex development and potential Androxal value in Europe. Our valuation is based on our probability-adjusted sum-of-the-parts analysis.

#### Earnings Estimates: (per share)

(Dec)	1Q	2Q	3Q	4Q	FY	P/E
<b>FY-15E</b>	-0.35A	-0.32A	-0.27A	-0.27	-1.22	NM
<b>FY-14A</b>	-0.37	-0.38	-0.32	-0.31	-1.37	NM
<b>FY-13A</b>	-0.41	-0.38	-0.26	-0.31	-1.33	NM
<b>FY-12A</b>	-0.17	-0.21	-0.30	-0.47	-1.18	NM

Source: Laidlaw & Company estimates

Healthcare/Biotechnology

Ticker: **RPRX**  
 Rating: **Buy**  
 Price Target: **\$ 3.50**

#### Trading Data:

Last Price (02/09/2016)	\$ 0.90
52-Week High (4/2/2015)	\$ 10.05
52-Week Low (1/20/2016)	\$ 0.89
Market Cap. (MM)	\$ 22
Shares Out. (MM)	24

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## Anticipated milestones in 2016 and beyond

Program	Indication	Event	Timing	Importance
Androxal	Secondary hypogonadism	MAA filing for Europe	Mid-2016	***
		Potential ex-U.S. partnership or other business development activities	2017	****
		Potential determine future clinical path	2016	****
Proellex	Uterine Fibroids	Potentially to report top-line results after one cycle treatment from low dose Proellex Phase II study	3Q16	****
		Potentially to schedule a type C meeting with the FDA to discuss Proellex Phase III study	4Q16	****
		Potentially to determine low dose oral vs. vaginal Proellex as final format for Phase III trial	2H16	****
		Potentially to start a Phase III study	2017	*****
	Endometriosis	Possible to complete exploratory Phase II study	1Q16	***
		Possible to report Phase II study top-line results	3Q16	****

\*\*\*\* / \*\*\*\*\* Major catalyst event that could impact share price very significantly while \*\*\* event is more informative

Source: Laidlaw & Company estimates and company presentation.

## Major risks

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**Clinical risks of trial study failure could have a significantly negative impact on RPRX share value.** Given that Androxal in secondary hypogonadism is the most advanced and most promising program in Repros' product portfolio, we believe the majority of RPRX share value (assessed by both us and the Street) resides in the potential clinical and regulatory success of this program. Even with a greater probability of clinical failure, a scenario where the FDA requests significantly more difficult Phase III studies at the upcoming meeting, should the company be unable to accomplish such a task; could significantly reduce RPRX share value.

**Market potential of Androxal in secondary hypogonadism is lower than projected.** With well-differentiated attributes, such as retaining spermatogenesis compared to marketed testosterone replacement products, coupled with the trend of increased prescription, and substantial unmet medical need; we believe the commercial outlook of Androxal could be substantial. However, given Androxal is a non-testosterone and competes in an environment of a well-entrenched TRT treatment paradigm, substantial and effective education efforts, in our opinion, are necessary to change physicians' prescribing habits and expand Androxal sales. The potential patent expiration of AndroGel could be an opportunity for Androxal but it also could become a challenge that limits Androxal's pricing flexibility. Overall, if our projection for the future market dynamics is incorrect, or the execution by the company (given the current management team has limited product commercialization experience), or potential licensing partner is inadequate; the revenue outlook for Androxal could disappoint.

**Androxal patent dispute could potentially affect the economics RPRX receives.** The company is currently in a legal dispute with Dr. Harry Fisch, who claims the two patents encompassing clomid as a treatment for hypogonadism. Despite the fact that the U.S. Patent and Trademark Office (PTO) recently reversed the rejections of Dr. Fisch's patent infringement claims, it might be too early or too uncertain, in our opinion, to determine the ultimate resolution. If such patents are not invalidated by the PTO or a court of competent jurisdiction, the company may be required to obtain a license, potentially for a fee, from the holder of such patents in order to develop Androxal further. Although we do not anticipate such a scenario would derail the development or commercial outlook of Androxal, we believe the economic reward to the company would be reduced modestly.

**Although promising, low dose Proellex and Proellex-V must still demonstrate proof-of-concept results.** Although the current clinical data regarding efficacy and safety from the low-dose oral Proellex and newly-developed Proellex-V study are encouraging, it is still be too early to fully project the product's future in endometriosis and in uterine fibroids. In addition,

it is still uncertain as which format of Proellex would be used for UF development going forward. Further, low dose oral Proellex in endometriosis Phase II study is still ongoing and we believe a positive efficacy and satisfactory safety profile are needed from the study to potentially to fully lift the clinical hold by the FDA to advance the program. Any negative outcomes could also a setback although Proellex only accounts for a minor portion of the RPRX valuation.

**Potential financing could dilute shareholders.** Although we estimate that the company's cash position could support operations, including R&D and M&S expenses, into 2016; the possibility exists that additional cash could be needed for other unexpected corporate development activities. If not from the non-dilutive sources, options could include a potentially-dilutive equity offering, of which could potentially affect current shareholders negatively due to dilution. However, we view such risk could be offset by the substantial value increase of the company's assets due to clinical advancement leading to commercialization.

Figure 1: Income Statement

<b>Repros Therapeutics – Income Statement</b>										
<b>(\$ MM)</b>	<b>2013</b>	<b>2014</b>	<b>1Q15</b>	<b>2Q15</b>	<b>3Q15</b>	<b>4Q15E</b>	<b>2015E</b>	<b>2016E</b>	<b>2017E</b>	<b>2018E</b>
<b>Revenue</b>										
Licensing fees	-	-	-	-	-	-	-	5.0	5.0	5.0
Product revenue	-	-	-	-	-	-	-	-	-	-
Research and development grants	-	-	-	-	-	-	-	-	-	-
Other Income	-	-	-	-	-	-	-	-	-	-
<b>Total Revenue</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$5.0</b>	<b>\$5.0</b>	<b>\$5.0</b>
Research and development	22.9	26.7	7.3	6.5	5.5	5.6	24.8	25.6	28.1	30.7
General and administrative	4.8	5.4	1.2	1.3	1.1	1.1	4.8	6.2	6.8	6.9
Sales and marketing	-	0.0	-	-	-	-	0.0	0.0	0.0	0.0
Interest expense and amortization of intangibles	-	-	-	-	-	-	0.0	-	-	-
<b>Total Operating Expenses</b>	<b>\$27.7</b>	<b>\$32.1</b>	<b>\$8.5</b>	<b>\$7.8</b>	<b>\$6.6</b>	<b>\$6.7</b>	<b>\$29.6</b>	<b>\$31.8</b>	<b>\$34.9</b>	<b>\$37.5</b>
<b>Operating Income (loss)</b>	<b>(\$27.7)</b>	<b>(\$32.1)</b>	<b>(\$8.5)</b>	<b>(\$7.8)</b>	<b>(\$6.6)</b>	<b>(\$6.7)</b>	<b>(\$29.6)</b>	<b>(\$26.8)</b>	<b>(\$29.9)</b>	<b>(\$32.5)</b>
Loss from continuing operations	-	-	-	-	-	-	-	-	-	-
Gain on disposal of discontinued operation	-	-	-	-	-	-	-	-	-	-
Net loss before cumulative effect of change in accounting principle	(27.7)	(32.1)	(8.5)	(7.8)	(6.6)	(6.7)	(29.6)	(26.8)	(29.9)	(32.5)
Cumulative effect of change in accounting principle	-	-	-	-	-	-	-	-	-	-
Income (loss) before tax expense	(27.7)	(32.1)	(8.5)	(7.8)	(6.6)	(6.7)	(29.6)	(26.8)	(29.9)	(32.5)
Income tax expense	-	-	-	-	-	-	-	0.0	0.0	0.0
<b>Net Incomes (Losses)</b>	<b>(\$27.7)</b>	<b>(\$32.1)</b>	<b>(\$8.5)</b>	<b>(\$7.8)</b>	<b>(\$6.6)</b>	<b>(\$6.7)</b>	<b>(\$29.6)</b>	<b>(\$26.8)</b>	<b>(\$29.9)</b>	<b>(\$32.5)</b>
Net Earnings (Losses) Per Share—Basic	(\$1.33)	(\$1.37)	(\$0.35)	(\$0.32)	(\$0.27)	(\$0.27)	(\$1.22)	(\$1.09)	(\$1.20)	(\$1.29)
Net Earnings (Losses) Per Share—Diluted	(\$1.33)	(\$1.37)	(\$0.35)	(\$0.32)	(\$0.27)	(\$0.27)	(\$1.22)	(\$1.09)	(\$1.20)	(\$1.29)
Shares outstanding—basic	20.8	23.4	24.3	24.3	24.3	24.3	24.3	24.5	24.9	25.3
Shares outstanding—diluted	20.8	23.4	24.3	24.3	24.3	24.3	24.3	24.5	24.9	25.3
<b>Margin Analysis (% of Revenue)</b>										
COGS		N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	10%	10%	10%
R&D	254578%	888433%	732100%	645000%	275300%	278053%	N.A.	512%	563%	613%
SG&A	53533%	181233%	120500%	134200%	55000%	55550%	N.A.	124%	136%	137%
Operating Income (loss)	-308011%	-1069567%	-852500%	-779100%	-330200%	-333503%	N.A.	-535%	-599%	-651%
Net Income	-308011%	-1069567%	-852500%	-779100%	-330200%	-333503%	N.A.	-535%	-599%	-651%
<b>Financial Indicator Growth Analysis (Y/Y)</b>										
Licensing fees	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0%	0%
Product royalties	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Total Revenue	200%	-67%	-50%	N.A.	N.A.	-33%	-100%	N.A.	0%	0%
Research and development	72%	16%	0%	-13%	-10%	-4%	-7%	3%	10%	9%
General and administrative	0%	13%	-2%	7%	-14%	-34%	-12%	30%	10%	1%
Sales and marketing		N.A.					N.A.	N.A.	0%	15%
Operating incomes	53%	16%	0%	-11%	-11%	-10%	-8%	-10%	12%	9%
Total Other Income, net	53%	16%	0%	-11%	-11%	-10%	-8%	-10%	12%	9%
Pretax Income	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Net Income	53%	16%	0%	-11%	-11%	-10%	-8%	-10%	12%	9%
EPS - Basic	13%	3%	-5%	-15%	-14%	-11%	-11%	-10%	10%	7%
EPS - Diluted	13%	3%	-5%	-15%	-14%	-11%	-11%	-10%	10%	7%
Shares outstanding—basic	36%	13%	5%	5%	4%	0%	4%	1%	2%	2%
Shares outstanding—diluted	36%	13%	5%	5%	4%	0%	4%	1%	2%	2%
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Source: Bloomberg LP; Company reports; Laidlaw & Company estimates.

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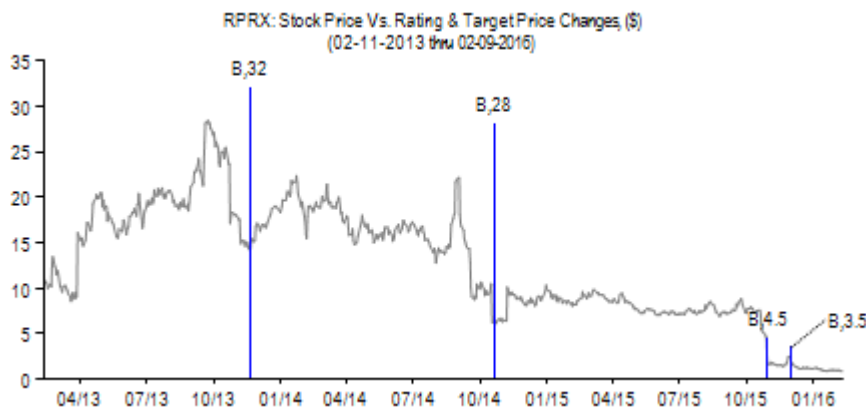
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#### Rating and Price Target Change History



#### 3 Year Rating Change History

Date	Rating	Closing Price (\$)
11/19/2013	Buy (B)	14.59

#### 3 Year Price Change History

Date	Target Price (\$)	Closing Price, (\$)
11/19/2013	32.00	14.59
10/20/2014	28.00	6.23
10/30/2015	4.50	1.71
12/01/2015	3.50	1.74

Source: Laidlaw & Company

Created by: Blue-Compass.net

Laidlaw & Company Rating System*		% of Companies Under Coverage With This Rating	% of Companies for which Laidlaw & Company has performed services for in the last 12 months	
			Investment Banking	Brokerage
<b>Strong Buy (SB)</b>	Expected to significantly outperform the sector over 12 months.	0.00%	0.00%	0.00%
<b>Buy (B)</b>	Expected to outperform the sector average over 12 months.	64.71%	26.47%	2.94%
<b>Hold (H)</b>	Expected returns to be in line with the sector average over 12 months.	0.00%	0.00%	0.00%
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