

Member FINRA/SIPC

 Toll Free: 561-391-5555 ♦ www.DawsonJames.com ♦ 1 N. Federal Highway, 5th Floor ♦ Boca Raton, FL 33432

Parnell Pharmaceuticals Holdings Ltd.
 (Nasdaq GM/PARN)

BUY
Parnell is an international veterinary pharmaceuticals and services company

December 6, 2016

Sherry Grisewood, CFA
 Managing Partner,
 Life Science Research
 561-208-2943
 sgrisewood@dawsonjames.com

**Nine Month Report Highlights:
 Revenues Climb 62%, New Credit Facility Announced**

Parnell Pharmaceuticals Holdings (Parnell) continues to deliver strong revenue growth with top line nine months results hitting AUD\$13.78 million, an impressive 62% increase over the 2015 nine month period. Revenue growth came from strong organic growth showings in the Production Animal and the Companion Animal businesses, which rose 30% and 156%, respectively, for the period. Company product revenue was augmented by the Contract Manufacturing business, which began generating revenue in the second quarter of 2016 and has generated AUD\$2.7 million through the nine months. In addition, and importantly, on November 22nd, the Company closed on an attractive \$20 million senior secured long-term loan with SWK Holdings, (SWKH/OTC/\$9.85/Not rated) a publicly trading alternative specialty finance company. With the new loan facility now in place, Parnell has the resources to drive current product sales and market penetration, launch **Zydx** once approved, and focus on achieving operational profitability in 2017.

Loan Agreement

The SWK Holdings loan was fully funded at closing and has a 48-month term. The loan is interest-bearing only for the first 24 months with interest payable quarterly in arrears. The transaction is anti-dilutive as there are no warrants or equity instrument covenants associated with the loan. A portion of the loan proceeds will be used to repay an existing \$11 million term loan with MidCap Financial. This is the second loan agreement Parnell has executed with SWK Holdings. In commenting on the transaction, Brad McCarthy, Parnell CFO said, "We believe this debt facility provides sufficient additional working capital to enable Parnell to transition to expected profitability in 2017."

Current Price: \$1.40

(PARNELL LISTED ON NASDAQ JUNE 2014)

FY Ended Dec 31 unless otherwise specified

Estimates (MM's)*	CY2014A	FY2015A	FY2016E
Revenues(AUD\$)	\$8.52	\$13.10 A	\$22.91 E
1H	\$4.26	\$4.93 A	\$8.23 A
2H	\$3.65	\$8.42 A	\$14.69 E

2017 Preliminary Revenue Estimate	\$33.47 E
Prev. Rev. Estimate (\$ mil.)	\$31.20 E

EPS(loss)	(CY2014A)	(FY2015A)	(FY2016E)
EPS(loss)	(\$2.18)	(\$1.03) A	(\$1.52) E
1H	(\$1.54)	(\$0.22) A	(\$0.85) A
2H	(\$0.68)	(\$0.81) A	(\$0.67) E

2017 Preliminary EPS(loss) Estimate	(\$1.44) E
-------------------------------------	-------------------

Price/Sales	2.01X	1.1X E
-------------	--------------	---------------

P/E (x)	NA	NA
---------	----	----

REV/Share	\$0.92	\$0.78	\$1.34 E
-----------	--------	--------	----------

EV/EBITDA (x)	NA	NA	NA
---------------	----	----	----

Stock Data

52-Week Range	\$1.01-\$4.89
---------------	---------------

Shares Outstanding (mil.)	14.90
---------------------------	-------

Market Capitalization	\$22.76MM
-----------------------	-----------

Enterprise Value	\$32.92MM
------------------	-----------

Current Ratio (09/16)	0.61X
-----------------------	-------

Book Value/Share (09/16)	\$0.53
--------------------------	--------

Price/Book (09/16)	2.52X
--------------------	-------

Average Trading Volume (3-Month)	36,618
----------------------------------	--------

Insider Ownership	9.4%
-------------------	------

Institutional Ownership	48.1%
-------------------------	-------

Short interest (Million shares)	39,210
---------------------------------	--------

Dividend / Yield	\$0.00/0.0%
------------------	-------------

*Some numbers may not add due to rounding. Source: Yahoo Finance/Cap IQ


Please find Important Disclosures beginning on Page 5.

Nine Month Highlights

(Note: Parnell reports all financial results in Australian dollars, (AUD/USD conversions are at AUD\$1=USD\$0.747. As a Foreign issuer, Parnell currently files only semi-annual financial reports under 6-F filings)

Top line revenue for the nine months ended September 30, 2016 was reported at AUD\$13.78 million, compared to AUD\$8.49 million for the comparable 2015 period, a 62% increase year-over-year. Further, product revenue growth is accelerating. We estimate product revenue for the third quarter revenue was approximately AUD\$5 million, or roughly 83% of the slightly over AUD\$6 million reported for the first six months of 2016. Contract manufacturing provided the additional revenue growth, albeit as ongoing revenue from the manufacturing contract announced last June.

1) Parnell reported exceptional growth in its US Production Animal business, which achieved a 30% year-over-year increase in sales and recorded yet another record sales month during the quarter. Management continues to attribute much of the growth to the further market penetration of **mySYNCH™** which integrates herd animal reproductive management and relevant clinical science with the Company's proprietary hand-held (cow-side) mobile-apps technology. Parnell reports now to have hundreds of thousands of cows enrolled in the **mySYNCH** program and is looking to geographically expand the availability of **mySYNCH** into Canada and Europe.

2) Parnell continues to make significant progress in penetrating US high prescribing, high revenue vet clinics, which management estimates to be roughly ¼ or about 5,000 of the 20,000 vet clinics in the US. The Company reports over 10,000 pet parents are now registered with **FETCH™**, an increase of some 3,000 since the end of the second quarter. The number of US vet clinics supporting **FETCH™** has reached 700. In addition, Parnell released **FETCH™** 2.0 during the third quarter, as pre-announced in their prior quarterly call held in August. As a result, the Companion Animal business generated a 156% year-over-year increase in revenue in the 2016 nine months and is maintaining the 150%+ growth rate seen during the first six months. Parnell is still aiming at reach 50,000 **FETCH**-registered pets by the time **Zydax** is launched in mid-2017 (assuming FDA approval in the 1H 2017). Based upon its current growth rate, Parnell hopes to have the US Companion Animal business operating profitably before **Zydax** is launched.

3) Other Third Quarter Noted Highlights

Parnell completed the in-licensing of **Reviderm™**, the novel antimicrobial spray-on liquid bandage for companion animals. The product was launched during the third quarter through Parnell's US Companion Animal sales channels and adds to the **Glyde** franchise. **Reviderm** will be followed shortly with the launch of **Luminous™**, Parnell's internally developed nutraceutical product for canine atopic dermatitis. **Luminous** contains the same active ingredients as **Glyde**. The addition of these products will help build the pet customer base and market awareness of the Company ahead of **Zydax** approval and launch.

Zydax Market Expansion – Cats

Parnell discussed progress on **Zydax** for feline OA. The pilot safety study was completed with doses up to eight times the expected commercial doses, administered over a four week treatment period with no adverse events reported. The Company has now commenced feline pilot efficacy studies. **Zydax** could become the first product approved for long term, safe treatment of OA in cats. This could be a very large opportunity for the **Zydax** franchise given there are over 50 million cats in the US, a high prevalence of OA in older cats and no approved treatments on the market. If Parnell continues to execute to its timeline for approval, the Company may be able to launch **Zydax** for OA in cats in early 2018.

Increased Institutional Ownership During the Quarter

A number of BlackRock related entities increased their ownership during the quarter. BlackRock Group LTD, BlackRock Inc. and BlackRock Investment Management LLC all increased their stakes in shares of Parnell.

BlackRock and Fidelity (Fidelity Select Biotech portfolio and Fidelity Advisor Biotechnology Fund) are now the largest institutional holders of Parnell. FMR, Endurant Capital Management and Sabby Management LLC round out the top five holders.

Nine Month 2016 Results

(Note: Parnell reports all financial results in Australian dollars, (AUD/USD conversions are at AUD\$1=USD\$0.747. As a Foreign issuer, Parnell currently files only semi-annual financial reports under 6-F filings)

Top line revenue for the nine months ended September 30, 2016 was reported at AUD\$13.78 million, compared to AUD\$8.49 million for the comparable 2015 period. Implied third quarter product revenue was AUD\$5.05 million, showing substantial sequential growth over the second quarter 2016. Contract manufacturing contributed AUD\$500,000 to the topline in the third quarter. Product gross margin was reported at 83%, similar to that of the 2015 period and a level Parnell expects to maintain through the remainder of 2016.

Management continues to focus on operating expenses. For the recent nine months, Parnell reported product cost of sales was AUD\$6.3 million compared to AUD\$5.2 million for the comparable 2015 period. This represented a 21% increase in COGS on a 62% increase in revenue, indicating Parnell is beginning to demonstrate operating leverage. The year-over-year increased General and Administrative expenses and Sales and Marketing expenses largely relate to investment in the US Companion Animal business over the past year. As revenue from new products kicks in and the utilization of the Company's digital technologies increases, management will be rationalizing some of these expenses. To that end, the Company expects S,G & A expenses will be reduced on a go-forward basis. The Company finished the quarter AUD\$2.1 million in cash, which has since been augmented by the new \$20 million long-term loan. Further, Parnell expects to be cash flow positive prior to the US launch of **Zyfax**.

Table 1
Parnell Financial Results and Estimates

As reported in Australian Dollars	As Reported			Estimates				
	Year Ended December 31*			As Reported	As Reported	Year Ended December 31		
	6 Mo End 6/30	6 Mo End 12/31	2015 Year	6 Mo End 6/30A	9 Mo End 9/30A	6 Mo End 12/31E	2016 YearE	2017E
Revenues:								
Sales of goods	\$ 4,927,965	\$ 8,241,788	\$ 13,169,753	\$ 6,025,614	\$ 11,074,480	\$ 11,192,297	\$ 17,217,911	\$ 24,868,306.05
Contract Manufacturing				\$ 2,200,000	\$ 2,700,000	\$ 3,500,000	\$ 5,700,000	\$ 8,600,000
Total Revenue	\$ 4,927,965	\$ 8,241,788	\$ 13,169,753	\$ 8,225,614	\$ 13,774,480	\$ 14,692,297	\$ 22,917,911	\$ 33,468,306
Other income (expense); primarily foreign currency fluct.	4,742,229	1,982,913	6,725,142	(147,815)	(1,147,162)	1,200	(146,615)	1,000
Revenue	9,670,194	10,224,701	19,894,895	\$ 8,077,799	\$ 12,627,318	\$ 14,693,497	\$ 22,771,296	\$ 33,469,306
Cost of Goods Sold	3,140,067	4,605,798	7,745,865	3,650,959	6,339,699	6,171,269	9,822,228	\$ 5,020,396
Gross Profit	6,530,127	5,618,903	12,149,030	4,574,655	7,434,781	8,522,229	13,096,884	28,448,910
Expenses:								
Research and development, regulatory expense	564,904	317,005	881,909	761,282	1,163,578	860,249	1,621,531	\$ 810,765
Less research tax credits and grants	0.00	0.00	0.00					0.00
General and administrative	5,165,879	6,774,367	11,940,246	\$ 7,298,121	\$ 10,713,500	\$ 7,663,027	\$ 14,961,148	\$ 13,465,033
Sales & Marketing	3,431,718	8,345,774	11,777,492	\$ 7,760,463	\$ 11,340,528	\$ 8,458,905	\$ 16,219,368	\$ 14,597,431
Total Operating Expenses	\$ (9,162,501)	\$ (15,437,146)	\$ (24,599,647)	\$ (15,819,866)	\$ (23,217,606)	\$ (16,982,180)	\$ (32,802,046)	\$ 28,873,229
Results from operating activities	\$ (2,632,374)	\$ (9,818,243)	\$ (12,450,617)	\$ (11,245,211)	\$ (15,782,825)	\$ (8,459,952)	\$ (19,705,163)	\$ (23,852,834)
Net finance income (costs):								
Net foreign exchange losses on borrowings	0.00	0.00	0.00	0.00				
Finance costs	(350,964)	(933,838)	(1,284,802)	(1,073,931)	(1,642,645)	\$ (1,350,000)	\$ (2,423,931)	(1,000,000)
Loss Before Income Taxes	\$ (2,983,338)	\$ (10,752,081)	\$ (13,735,419)	\$ (12,467,007)	\$ (18,572,632)	\$ (9,809,952)	\$ (22,276,959)	\$ (24,852,834)
Income (expense) benefit	(2,106.00)	(7)	(2,113)	(10,924)	(10,924)	\$ (15,000)	\$ (25,924)	\$ (28,516)
Income (Loss)	\$ (2,985,444)	\$ (10,752,088)	\$ (13,737,532)	\$ (12,477,931)	\$ (18,583,557)	\$ (9,824,952)	\$ (22,302,883)	\$ (24,881,350)
Foreign Currency translation	(808,664)	(820,859)	(1,629,523)	\$ 209,401	\$ 1,225,777	\$ (200,000)	\$ 18,592,958	\$ 500,000
Total Comprehensive Loss for the Year	\$ (3,794,108)	\$ (11,572,947.00)	\$ (15,367,055)	\$ (12,268,530)	\$ (17,357,780)	\$ (10,024,952)	\$ (3,709,925)	\$ (24,381,350)
Net Loss per share (AUD\$)	\$ (0.22)	\$ (0.81)	\$ (1.03)	\$ (0.85)	\$ (1.21)	\$ (0.67)	\$ (1.52)	\$ (1.44)
Weighted average number of common shares outstanding	13,245,945	13,283,722	14,919,471	14,432,834	14,545,272	15,035,667	\$ 14,936,361	\$ 16,900,000

Some numbers may not add due to rounding

*Parnell changed from fiscal to calendar year in 2015

As a Foreign issuer, Parnell currently reports semiannually

Source: Company SEC filings, press releases, quarterly call transcripts, DJ estimates

Outlook

We believe Parnell's revenue "drivers" are intact as management continues to execute well against plan. Product revenues and market penetration are ramping in line with management guidance, despite the delay in refiling **Zydax** with the FDA. The wait may be worth it, however, if it can ultimately leads to an osteoarthritis (OA) disease modification label claim (no other treatment currently can make such a clinical claim) which would be above the currently expected claim of "for the treatment of the clinical signs of (diagnosed) OA". We continue to believe the Company is highly undervalued relative to its peers and so continue to rate its shares a **BUY**. SG

Key Future Milestones

<u>Upcoming Event</u>	<u>Timing</u>	<u>Impact</u>
1. Refiling of Zydax with the FDA	Q4 2016	US and EMA filings for late 1H 2017 approval (US& EMA)
2. Launch of Luminous	Q4 2016	Base-building with vet clinics
3. Zydax European Partner	Q4 '16-Q1 '17	Distribution of Zydax in Europe
4. Announce 2 nd contract manufacturing client	Q4 '16-Q1 '17	Revenue generation
5. Initiation of pivotal safety and efficacy studies for Zydax feline OA	YE '16/Q1 '17	Indication expansion strategy for Zydax
6. PAR121 and PAR122 FDA filings	2H 2017	Sets commercial launch timeline for 2018

Company Summary

Parnell is a fully integrated international veterinary pharmaceuticals business with drug development, formulation, multi-national clinical development and operations/manufacturing expertise. The Company currently operates in three primary veterinary segments: companion veterinary, reproductive veterinary and equine performance in both US and ex-US markets. Parnell has direct marketing and sales presence in the US, Australia and New Zealand and utilizes a range of multi-national and local marketing partners in other markets, such as in Canada. The company sells products in 14 countries. The primary ex-US markets are Australia, New Zealand, Asia, the Middle East and Canada. Parnell is expected to launch its market-disruptive OA product, **Zydax**, for dogs in 2017.

Risk Factors

In addition to normal economic and market risk factors that impact most equities and the common risks shared by Parnell Pharmaceuticals Holdings with other companies in the industry, we believe an investment in PARN involves the following risks:

- **FDA, CVM and regulatory risks** – Parnell is subject to regulatory review for its ongoing research and development activities, commercial marketing approval as well as laboratory facilities, principally with the US Food and Drug Administration Center for Veterinary Medicine but also with the EMA and other international regulatory agencies as well.
- **Need to defend patents, trade secrets and other intellectual property** – At present, Parnell holds a limited number of patents relating to its products, methods and manufacturing and depends in part on trade secrets. The Company may need to defend its intellectual property in the US and overseas in the future. Further, Parnell currently has limited patent protection for some of its pipeline product candidates. The Company, or our licensing partners, have made various applications which may never result in effective patents, as there is already an existing array of prior art that may preclude granting of patents.
- **Need to raise additional capital** – Although Parnell has historically successfully raised funds in the public markets, there can be no guarantee of such success in the future. Currently, the Company has limited cash on hand to fund ongoing research and development programs, ongoing clinical trials and product commercialization and launch activities. Until such time as cash flows from product sales surmount R&D, clinical and operational activities, Parnell will need to seek additional funding as the Company does not have a history of profitable operations. Unforeseen events including potential delays in product sales, clinical programs and regulatory approvals could require Parnell to raise additional capital through the sale of equity, therefore potentially diluting current shareholders.

- **Limited stock liquidity** – Trading volume in Parnell has been comparatively light compared to other stocks in its industry, and as such, news regarding Parnell, its target markets, partners and/or competitors could lead to significant volatility in the stock price.
- **Competitive Markets** – The Company competes in its companion and production animal health markets with a number of other manufacturers, marketers and service companies, many of whom represent much larger companies with substantial resources. There can be no assurance that the Company will be able to successfully launch new products into these competitive markets in the future.
- **Currency Risk**- Parnell reports financial information and revenue in Australian dollars, yet the majority of revenues are derived in US dollars and to a lesser extent in New Zealand dollars. A significant appreciation of the Australian dollar would negatively impact revenues and profits. As such the Company is heavily exposed to foreign currency fluctuations. Parnell does not maintain structured hedging positions to protect from currency movements.
- **Pricing risk**- Changes in distribution channels for pet therapeutics could negatively impact market share, margins and distribution of Parnell’s products. Historically, animal owners (companion animals and production animals) have purchased animal health pharmaceuticals through their veterinarians. There have been changes in regulations in many countries that have allowed non-veterinary practices to supply pharmaceuticals directly to the public on the prescription of a veterinarian. Both these trends have seen downward price pressure exerted on pharmaceutical companies as the distribution channel seeks to offer increasingly attractive pricing to consumers.

Important Disclosures:

Price Chart:



Price target and ratings changes over the past 3 years:

Initiated – May 24, 2016– at \$1.56
 Price Target- No price target published.
 Rating change: None

Company Updates provide current information we believe might be noteworthy to investors regarding the subject companies. Company Updates are not intended to be complete research reports. More detailed information concerning the rated companies referenced in this Update, including the full reports, basis for price targets and other disclosures, may be found at:

http://dawsonjames.com/research_coverage.

Important Disclosures:

Dawson James Securities, Inc. (the "Firm") is a member of the Financial Industry Regulatory Authority ("FINRA") and the Securities Investor Protection Corporation ("SIPC").

The Firm does not make a market in the securities of the subject companies. The Firm has not engaged in investment banking relationships with PARN in the prior 12 months, as a manager or co-manager of a public offering and has received compensation resulting from those relationships. The Firm may seek compensation for investment banking services in the future from each of the subject companies. The Firm may have received other compensation from the subject companies in the last 12 months for services unrelated to investment banking.

Neither the research analyst(s) whose name appears on this report nor any member of his (their) household is an officer, director or advisory board member of these companies. The Firm and/or its directors and employees may own securities of the company(s) in this report and may increase or decrease holdings in the future. As of November 30, 2016, the Firm as a whole did not beneficially own 1% or more of any class of common equity securities of any of the subject company (s) of this report. The Firm, its officers, directors, analysts or employees may effect transactions in and have long or short positions in the securities (or options or warrants related to those securities) of the companies subject to this report. The Firm may effect transactions as principal or agent in those securities.

Analysts receive no direct compensation in connection with the Firm's investment banking business. All Firm employees, including the analyst(s) responsible for preparing this report, may be eligible to receive non-product or service specific monetary bonus compensation that is based upon various factors, including total revenues of the Firm and its affiliates as well as a portion of the proceeds from a broad pool of investment vehicles consisting of components of the compensation generated by investment banking activities, including but not limited to shares of stock and/or warrants, which may or may not include the securities referenced in this report.

Although the statements in this report have been obtained from and are based upon recognized statistical services, issuer reports or communications, or other sources that the Firm believes to be reliable, we cannot guarantee their accuracy. All opinions and estimates included in this report constitute the analyst's judgment as of the date of this report and are subject to change without notice.

The securities of the company discussed in this report may be unsuitable for investors depending on their specific investment objectives and financial position. This report is offered for informational purposes only, and does not constitute an offer or solicitation to buy or sell any securities discussed herein in any jurisdiction where such would be prohibited. Additional information is available upon request.

Ratings Definitions:

- 1) **Buy:** the analyst believes the price of the stock will appreciate and produce a total return of at least 20% over the next 12-18 months, based upon the pricing at the time of the initiation of coverage;
- 2) **Neutral:** the analyst believes the price of the stock is fairly valued for the next 12-18 months;
- 3) **Sell:** the analyst believes the price of the stock will decline by at least 20% over the next 12-18 months and should be sold.

The following chart reflects the range of current research report ratings for all companies followed by the analysts of the Firm. The chart also reflects the research report ratings relating to those companies for which the Firm has performed investment banking services.

Ratings Distribution	Company Coverage		Investment Banking	
	# of Companies	% of Total	# of Companies	% of Totals
Market Outperform (Buy)	2	22%	1	50%
Market Perform (Neutral)	1	11%	1	100%
Market Underperform (Sell)	0	0%	0	0%
Rating Suspensions*	6	67%	5	71%
Total	9	100%	7	22%

*Suspensions are ratings under review for possible change due to unusual market-moving news, and/or analyst departure/change

Analyst Certification:

The analyst(s) whose name appears on this research report certifies that 1) all of the views expressed in this report accurately reflect his (their) personal views about any and all of the subject securities or issuers discussed; and 2) no part of the research analyst's compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed by the research analyst in this research report; and 3) all Dawson James employees, including the analyst(s) responsible for preparing this research report, may be eligible to receive non-product or service specific monetary bonus compensation that is based upon various factors, including total revenues of Dawson James and its affiliates as well as a portion of the proceeds from a broad pool of investment vehicles consisting of components of the compensation generated by investment banking activities, including but not limited to shares of stock and/or warrants, which may or may not include the securities referenced in this report.