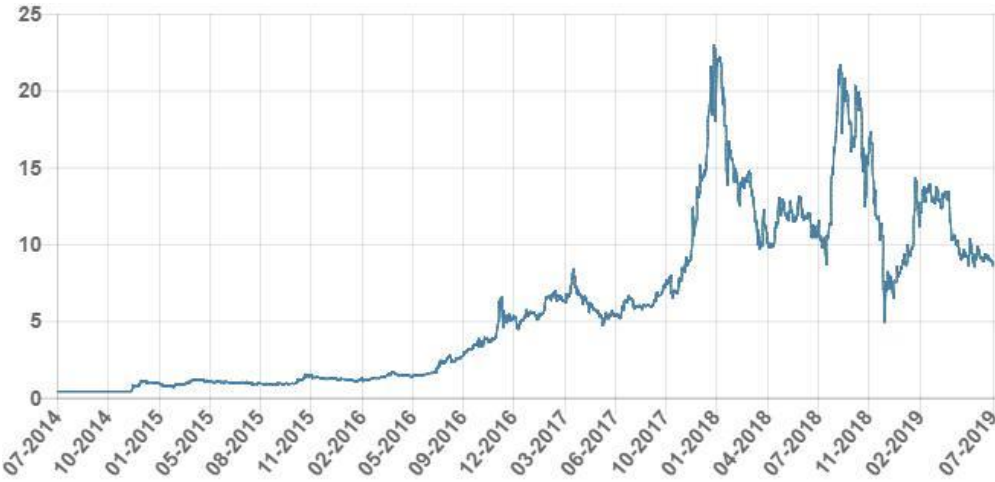


-Close Price/Date  
\$8.53 (CAD) 11/07/2019

Weighted Valuation  
\$12.92 (CAD)



Overall Rating  
Undervalued by 51.4%

Valuation Models (in order of importance)	Analyst Consensus: \$15.09 (CAD) Discounted Cash Flow: \$9.65 (CAD)
Valuation Methods	This company is:
Cash Flow:	Undervalued on a Cash Flow Valuation
Comparable Company:	No Comparable Valuation
Asset:	Undervalued on an Asset Valuation

#### Information

My name is Michael El-khoury, I am a Student at the University of New Brunswick, majoring in Finance and I am just starting an internship here at StockCalc for the summer. One of my tasks is to do reports on companies using StockCalc's useful tool and external resources.

This Stock is	Technically		
Fundamentally	Buy	Hold	Sell
Under Valued	Buy the Stock	Buy or Wait on Technical	Wait on Technical
Fairly Valued	Buy or Wait on Fundamental	Wait on Both Indicators for Direction	Sell or Wait on Technical
Over Valued	Wait on Fundamental	Sell or Wait on Fundamental	Sell the Stock

#### Company Overview (APHA:TSE CAD)

Price	8.53
Range	8.50 - 8.77
52 week	5.00 - 21.70
Open	8.66
Vol / Avg.	1.17M/1.22M
Mkt cap	2.14B
P/E	32.86
Div/yield	0.00/0.00
EPS	-0.18
Shares	250.58M
Beta	2.58

#### Drivers of the Health Care Sector

The health care sector accounts for many sub industries such as pharmaceuticals, medical devices and now medical marijuana. The health care sector has many drivers, such as the demographic trends of a growing elderly population worldwide, medical technology advancements, increase numbers of obesity and diabetes and personalized medicine that can help with trauma such as PTSD. Also medical legal patents are a big factor in the medical sector and negative effect is losing control of your operating expenses.

#### Recommendation

My recommendation for Aphria Inc. is currently a **HOLD**. I have looked at the provided information from StockCalc's fundamental valuation report. APHA is undervalued noted on their asset valuation and cash flows, deriving a \$12.92 weighted valuation, making APHA undervalued by 51.4%. Taking a deeper look into the health care sector, there is a massive market due to an aging population, technology advancements and the growth potential of the legal marijuana . The legal medical marijuana market is massive, aiming it be a 2.5 billion market in Canada and 650 billion market globally both by 2025. What's steering me away from a BUY decision for APHA would be the operating losses and lower sales of kilograms of Marijuana in their third quarter report. I suggest keeping a close eye on APHA until the next quarter results which is August 15th and would buy it if they show any improvements from last quarter and when they have a stronger top of the line action plan and see also an increase in kilograms sold.

#### Company Description

Aphria Inc and its subsidiaries produce and sell medical marijuana. Its products include Capsules, Oral solutions, and Vaporizers. The company's operations are based in Leamington, Ontario. It is focused on producing and selling medical marijuana and its derivatives through retail sales and wholesale channels.

#### Company Latest News

On April 15<sup>th</sup>, 2019, Aphria the Canadian Weed manufacturer reported their fiscal year their quarters results. Their net revenue is up from 240% from previous quarter and also 617% from the prior year. Even with such posted revenue growth, they had a net loss of 108.2 million, also did not make the analyst consensus estimates, which were \$85.2 million revenue and eps of \$.03. They also seen a decrease of kilogram sold from 3408.9 to 2636.5 kilos.

#### Forecast of the Medical Marijuana industry

In 2016 the legal medical marijuana market size in Canada was \$600 million now projected to hit \$2.5 billion by 2025. Early 2000s is when Canada was one of the first country to legalize medical marijuana but it was not until October 2018, that legalized the cultivation, possession, acquisition and consumption of marijuana. This boosted the Canadian economy and create big marijuana players, Canopy Growth, Tilray and Aphria. Aphria specializes in adult-use and medical purposes, they target a \$150 billion global marijuana market by 2025. They have footholds not only in Canada but also in Europe, South America, Africa and Asia. During their third quarter results APHA had a 12.6% drop in price, the whole Marijuana sector actually seen a negative downfall overall, less kilograms are being sold and operating expenses are increasing do constant regulation changes. The marijuana market acts like the business cycle with booms and recessions, it has come a long way since the early 2000s and I will continue to grow over time as it grows more in popularity and needed for medical reasons in the next 1-3 years.

#### Valuation Details



Discounted Cash Flow and Sensitivity Analysis for APHA:TSE

Using a discounted cash flow model we generated an intrinsic value of \$9.65 (CAD) for APHA:TSE

Sensitivity Analysis

(showing how changes in the input variables impact the DCF calculation)

APHA:TSE	Current Values	Valuation If Dropped *		Valuation If Raised *	
Calculated Value:	\$9.65	1%	5%	1%	5%
WACC (or Ke)	17.38	\$10.46		\$8.94	
Terminal Growth Rate	3.00	\$9.09		\$10.29	
Tax Rate	0.18	\$10.25		\$9.05	
Cash Flow	552,023,463	\$9.15		\$10.15	
Capital Expenditures	-14,549,363	\$9.64		\$9.66	
Long Term Debt	0	\$9.65		\$9.65	

\* Changes are absolute: ex WACC from 8% to 7%

Comparables Model

Using similar companies and price based ratios we generated a valuation of \$0.00 (CAD) for APHA:TSE. We also generated a valuation of \$0.00 (CAD) using other metrics and comparables. The comparable companies were .

Company APHA:TSE	End Date Value	Price Based on Comps	Adjustment Factor (%)
Earnings/Share	(\$0.18) (CAD)	\$0.00 (CAD)	0.0
Book Value/Share	\$6.72 (CAD)	\$0.00 (CAD)	9.0
Sales/Share	\$0.52 (CAD)	\$0.00 (CAD)	0.0
Cash Flow/Share	(\$0.19) (CAD)	\$0.00 (CAD)	0.0
EBITDA/Share	\$0.00 (CAD)	\$0.00 (CAD)	0.0

APHA:TSE	Ratios Used	Average Values
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Multiples

Using a multiples approach we generated a valuation of \$16.16 (CAD) for APHA:TSE

Company APHA:TSE	End Date Value	Price Based on Comps	Adjustment Factor
Earnings/Share	(\$0.18) (CAD)	\$0.00 (CAD)	0
Book Value/Share	\$6.72 (CAD)	\$21.26 (CAD)	0
Sales/Share	\$0.52 (CAD)	\$21.60 (CAD)	0
Cash Flow/Share	(\$0.19) (CAD)	\$0.00 (CAD)	0
EBITDA/Share	\$0.19 (CAD)	\$5.63 (CAD)	0

Ratios	Ratio Average
PE Ratio	96.67
PB Ratio	3.17
PS Ratio	41.41
PCF Ratio	239.88
EV to EBITDA	29.65

Adjusted Book Value versus Historical Price to Book

The average the Price to Book ratio for APHA:TSE for the last 8 years was 3.08. We ran the Adjusted Book Value for APHA:TSE and generated a book value of \$8.01 (CAD). By multiplying these we get an adjusted valuation of \$24.67 (CAD)

Analyst Data

In the Stockcalc database there are 8 analysts that provide a valuation for APHA:TSE. The 8 analysts have a consensus valuation for APHA:TSE for 2020 of \$15.09 (CAD).

Analyst Recommendation					
Buy	Hold	Sell	Rating (of 5)	Guidance	As Of
4	2	0	4.2222	Outperform	2019-7-10

Current Price: 8.53 CAD

Analyst Consensus			
CAD Millions	2019	2020	2021
Mean EPS	-0.16	0.22	0.61
# EPS Analysts	5	5	4
Mean Revenue	209.50	710.50	1,029.60
# Revenue Analysts	6	6	4
Mean Target Price	15.09		
Mean Cash Flow	-0.29	0.42	
Mean EBITDA			
Mean Net Income			
Mean Debt Outstanding			
Mean Tax Rate			
Mean Growth Rate			
Mean Capital Expenditure			

## Explanation of Valuation Models

We have up to 6 valuation points for each company in the database.

The Discounted Cash Flow (DCF) valuation is a cash flow model where cash flow projections are discounted back to the present to calculate value per share. DCF is a common valuation technique especially for companies undergoing irregular cash flows such as resource companies (mining, forestry, oil and gas) going through price cycles or smaller companies about to generate cash flow (junior exploration companies, junior pharma, technology firms...).

The Price Comparables valuation is the result of valuing the company we are looking at on the basis of ratios from selected comparable companies: Price to Earnings, Price to Book, Price to Sales, Price to Cash Flow, Enterprise Value (EV) to EBITDA. Each of these ratios for the selected comparable companies are averaged and multiplied by the values for the company we are interested in to calculate a value per share for our selected company.

We have included the Other Comparables as a way to value companies that cannot be valued using Earnings based ratios. This technique is very useful for companies still experiencing negative cash flows such as mining exploration firms. We use Cash/Share, Book Value/Share, MarketCap, 1 Year Return, NetPPE as the ratios here. Each of these ratios for the selected comparable companies are averaged and multiplied by the values for the company we are interested in to calculate a value per share for our selected company.

Multiples are similar to Price comparables where we look at current or historic ratios for the company in question to assess what it should be worth today based on those historic ratios. We use the same 5 ratios as in the price comparables and value the company with its historic averages.

With Adjusted Book Value (ABV) we calculate the book value per share for the company based on its balance sheet and multiply that book value per share by its historical price to book ratio to calculate a value per share.

If we have Analyst coverage for the company we use the consensus target price here.

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