## NYSE Data Project

Presented By

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With focus on

**Biotechnology Sector (VRTX&REGN)** 

## How The Biotechnology sector(VRTX&REGN) Look Like Throughout 4 Years?

Profit and Loss Statement <b>VRTX</b>												
	Historica I						Assumptions					
	Year .	1	Year 2		Year 3		Year 4		Year 5		Year 6	
	\$ 15	5 <i>27</i>	\$ 1	211	\$	580	\$ 1	032	\$ 1	049	\$ 1	130
Revenue	042 0	000	975	000	415	000	336	000	951	825	383	210
	\$ .	279	\$	130	\$	60	\$	124				
cogs	<i>885 0</i>	000	277	000	987	000	512	000				
	\$ 12	247	\$ 1	081	\$	519	\$	907	\$	914	\$	873
Gross Profit	<i>157 0</i>	000	698	000	428	000	824	000	386	<i>265</i>	879	766
Sales, General	\$	432	\$	356	\$	305	\$	376				
and Admin	<i>681 0</i>	000	188	000	409	000	5 <i>75</i>	000				
Operating	\$		\$		\$		\$					
Expensess	-		-		-		-					
Research and												
Development	905 0	000	097	000	<i>506</i>	000	922	000				
Total operating	-		-		-							
expensess	<i>586</i> 0	000	285	000	915	000	497	000				
	\$		-		-			-464			1 '	332
<b>Operating Profit</b>	<i>571 0</i>	000	587	000	487	000	673	000	822	<i>209</i>	441	668

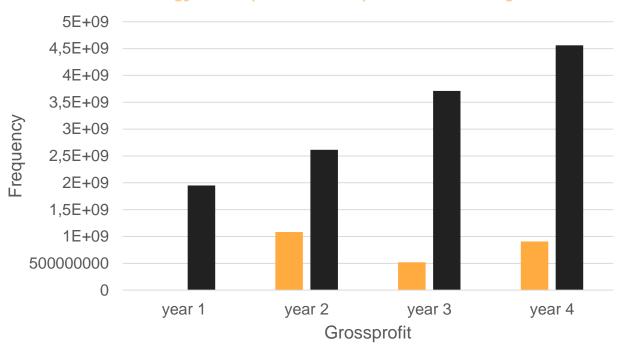
Profit and Loss Statement <b>REGN</b>													
		Historical								Assumptions			
	Yea	r 1	Yea	r <b>2</b>	Yea	r 3	Yea	r 4	Year 5	Year 6			
	\$ 2	104	\$ 2	819	\$ 4	103	\$ 4	860	\$ 6 447	\$ 6 941			
Revenue	745	000	<i>557</i>	000	728	000	427	000	297 593	191 749			
	\$	155	\$	205	\$	392	\$	299					
cogs	<i>355</i>	000	018	000	709	000	694	000					
	\$ 1	949	\$ 2	614	\$ 3	711	\$ 4	560	\$ 5 957	\$ 5 366			
Gross Profit	<i>390</i>	000	<i>539</i>	000	019	000	733	000	495 883	115 641			
Sales, General	\$	346	\$	519	\$	838	\$ 1	177					
and Admin	393	000	<i>267</i>	000	<b>526</b>	000	697	000					
Operating	\$		\$		\$		\$						
Expensess	-		-		-		-						
Research and	\$	859	\$ 1	271	\$ 1	620	\$ 2	052					
Development	947	000	<i>353</i>	000	<i>577</i>	000	295	000					
Total													
operating	\$ 1	<b>206</b>	\$ 1	<i>790</i>	\$ 2	459	\$ 3	229					
expensess	340	000	<i>620</i>	000	103	000	992	000					
Operating	\$	743	\$	823	\$ 1	251	\$ 1	330	\$ 1 973	\$ 2 041			
Profit	050	000	919	000	916	000	741	000	050 922	379 719			

	VRTX
Years	Operating Profit
Year 1	\$ 48 571 000
Year 2	\$ -156 587 000
Year 3	\$ -641 487 000
Year 4	\$ -464 673 000

REGN								
Years Operating Profit								
Year 1	\$	743 050 000						
Year 2	\$	823 919 000						
Year 3	\$	1 251 916 000						
Year 4	\$	1 330 741 000						

		1					
VRTX		Difference	RE	REGN			
Mean	\$ -303 544 000		Mean	\$	1 037 406 500		
Standard Deviation	\$ 308 625 641		Standard Deviation	\$	296 806 399		
Minimum Value	\$ -641 487 000	\$ -641 487 000	Minimum Value	\$	743 050 000	\$ 743 050 00	
First Quartile	\$ -508 876 500	\$ 132 610 500	First Quartile	\$	803 701 750	\$ 60 651 75	
Second Quartile (Median)	\$ -310 630 000	\$ 198 246 500	Second Quartile (Median)	\$	1 037 917 500	\$ 234 215 7	
Third Quartile	\$ -105 297 500	\$ 205 332 500	Third Quartile	\$	1 271 622 250	\$ 233 704 7	
Maximum Value	\$ 48 571 000	\$ 153 868 500	Maximum Value	\$	1 330 741 000	\$ 59 118 7	
Range	\$ 690 058 000		Range	\$	587 691 000		
Interquartile Range (IQR)	\$ 403 579 000		Interquartile Range (IQR)	\$	467 920 500		

## **How The Biotechnology sector(VRTX&REGN) Look Like Throughout 4 Years**



■ VRTX ■ REGN

In these charts, we can see the annual revenues for companies in 4 years in the Biotechnology.

The skewed for REGN sector is left skewed

Revenue Growth % REGN Base year 34% 46% 18%

Revenue Growth % VRTX Base year -21% -52% 78%

## Reference

Analytics with Spreadsheets (Masterschool) – Udacity

The mean total revenue for REGN (\$1037406500) was higher compared to mean total revenue for VRTX (\$-303544000). it looks like company REGN have a higher total revenue on average than VRTX.

The Median total revenue for REGN(\$1037917500) was higher compared to median total revenue for VRTX (\$-310630000).

The standard deviation of total revenue for VRTX(\$308625641) was higher compared to the standard deviation of total revenue for REGN(296806399).

"It appears that VRTX have less stable revenues as they change on average more than the average change (Standard Deviation) of REGN.

"The Range for VRTX Total Revenue at \$6900580000 is higher compared with The Range of Total Revenue for the REGN at only \$587691000. It looks like the VRTX have greater variability in the total revenues they receive because their range is more spread out."