

## Insulin Price Per Vial Over the Years

Humalog		Novolog		Lantus		Levemir	
Date (YYYY/MM)	Price	Date (YYYY/MM)	Price	Date (YYYY/MM)	Price	Date (YYYY/MM)	Price
1996/08	\$21.38	2001/06	\$39.82	2001/05	\$35.58	2006/01	\$67.12
1997/07	\$22.11	2001/10	\$41.19	2001/12	\$38.01	2007/01	\$72.78
1998/06	\$24.32	2002/04	\$45.31	2003/01	\$41.24	2008/01	\$76.82
1999/04	\$27.27	2002/09	\$48.74	2003/08	\$44.47	2008/07	\$81.67
2000/03	\$30.22	2003/05	\$53.55	2004/01	\$48.52	2009/01	\$86.52
2000/08	\$33.91	2003/11	\$54.92	2004/10	\$53.37	2009/12	\$92.18
2001/01	\$39.80	2004/08	\$59.73	2004/12	\$56.60	2010/12	\$100.27
2001/10	\$42.01	2005/03	\$64.53	2005/08	\$60.65	2011/11	\$114.02
2002/04	\$44.96	2005/08	\$66.59	2006/01	\$62.26	2012/04	\$120.49
2002/09	\$49.39	2006/04	\$70.02	2006/07	\$64.69	2012/10	\$135.85
2003/05	\$53.81	2006/09	\$76.20	2007/01	\$67.92	2013/05	\$148.79
2003/11	\$56.02	2007/08	\$81.01	2007/07	\$70.35	2013/08	\$166.58
2004/08	\$59.71	2008/03	\$86.50	2008/01	\$73.58	2013/12	\$191.64
2005/03	\$64.86	2008/08	\$92.68	2008/06	\$80.86	2014/05	\$222.37
2005/10	\$65.60	2009/07	\$99.54	2008/12	\$85.71	2014/11	\$248.25
2006/04	\$70.02	2010/03	\$107.78	2009/12	\$92.99	2015/08	\$268.46
2006/12	\$73.71	2010/10	\$116.70	2010/12	\$99.46		
2007/03	\$76.66	2011/04	\$122.20	2011/12	\$112.40		
2007/08	\$80.34	2011/12	\$131.81	2012/04	\$122.91		
2008/03	\$86.24	2012/05	\$140.73	2012/10	\$131.81		
2008/08	\$91.40	2012/10	\$152.40	2013/04	\$145.55		
2009/06	\$99.51	2013/04	\$167.51	2013/08	\$166.58		
2010/01	\$107.62	2013/08	\$183.98	2013/12	\$191.64		
2010/11	\$115.72	2014/03	\$202.52	2014/06	\$222.37		
2011/05	\$122.36	2014/09	\$223.80	2014/12	\$248.25		
2011/11	\$130.47	2015/03	\$236.84	2015/09	\$249.06		
2012/06	\$139.31	2015/10	\$255.38				
2012/11	\$151.11	2016/05	\$275.29				
2013/05	\$166.58						
2013/10	\$183.54						
2014/04	\$201.23						
2014/10	\$221.13						
2015/04	\$235.14						
2015/11	\$254.30						
2016/08	\$274.20						

### Methodology

Insulin price information was gathered for Humalog, Novolog, Lantus and Levemir insulins through a process of reverse engineering data points from two different graphs compiled by Andy Kiersz based on data from Truven Health Analytics. The graph depicting the price increases for Humalog and Novolog insulins was published in a Business Insider article written by Lydia Ramsey in May of 2017; the graph depicting Lantus and Levemir was also published in a Business Insider article written by Ramsey in September of 2016. The data points were extracted using WebPlotDigitizer v4.2, a web-based application developed by Ankit Rohatgi.

## Limitations

The lack of transparency in how insulin has been historically priced along with the use of a web-based tool to extract data leaves room for a margin of human error.

## Appendix

**Appendix A:** Humalog Insulin Cost per Vial WebPlotDigitizer Data Extraction Plot

**Appendix B:** Novolog Insulin Cost per Vial WebPlotDigitizer Data Extraction Plot

**Appendix C:** Lantus Insulin Cost per Vial WebPlotDigitizer Data Extraction Plot

**Appendix D:** Levemir Insulin Cost per Vial WebPlotDigitizer Data Extraction Plot

## Appendix A: Humalog Insulin Cost per Vial WebPlotDigitizer Data Extraction Plot



Figure 1 - Graph by Andy Kiersz/ data from Truven Health Analytics / Published in Business Insider (2017). Data collection shown by red dots taken with WebPlotDigitizer.

## Appendix B: Novolog Insulin Cost per Vial WebPlotDigitizer Data Extraction Plot

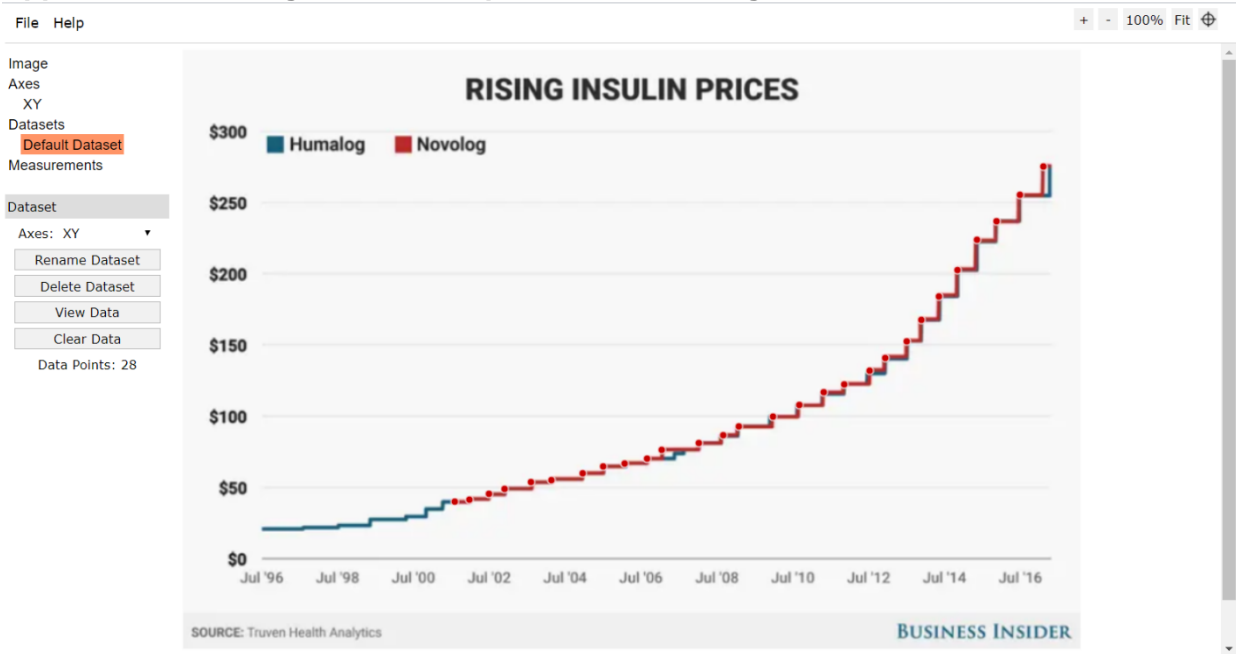


Figure 2 - Graph by Andy Kiersz/ data from Truven Health Analytics / Published in Business Insider (2017). Data collection shown by red dots taken with WebPlotDigitizer.

## Appendix C: Lantus Insulin Cost per Vial WebPlotDigitizer Data Extraction Plot



Figure 3 - Graph by Andy Kiersz/ data from Truven Health Analytics / Published in Business Insider (2016). Data collection shown by red dots taken with WebPlotDigitizer.

## Appendix D: Levemir Insulin Cost per Vial WebPlotDigitizer Data Extraction Plot

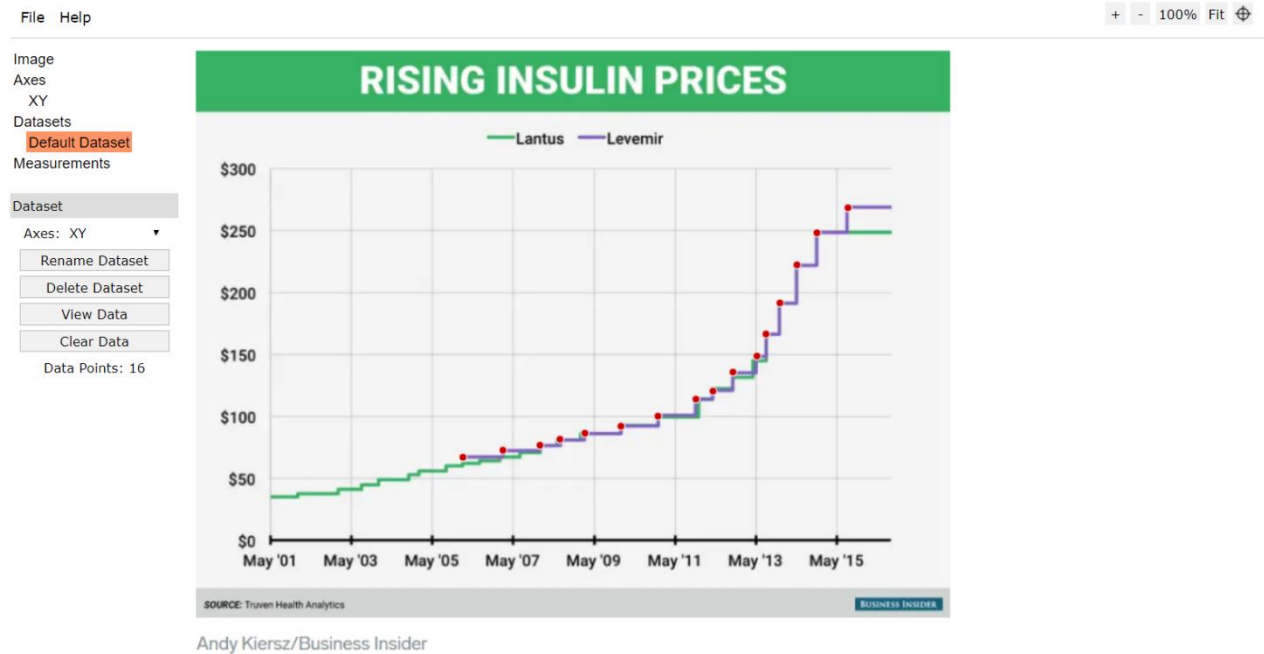


Figure 3 - Graph by Andy Kiersz/ data from Truven Health Analytics / Published in Business Insider (2016). Data collection shown by red dots taken with WebPlotDigitizer.

### References

- Ramsey, L., & Kiersz, A. (2016, September 17). There's something odd about the way insulin prices change. Retrieved from <https://www.businessinsider.com/rising-insulin-prices-track-competitors-closely-2016-9>
- Ramsey, L., & Kiersz, A. (2017, May 15). The prices for life-saving diabetes medications have increased again. Retrieved from <https://www.businessinsider.com/insulin-prices-increased-in-2017-2017-5>
- Rohatgi, A. (2019, April). WebPlotDigitizer (Version 4.2) [Computer software]. Retrieved May 09, 2020, from <https://automeris.io/WebPlotDigitizer>