



**COMUNICACIÓN DE INFORMACIÓN RELEVANTE  
1NKEMIA IUCT GROUP, S.A.**

En virtud de lo previsto en el artículo 17 del Reglamento (UE) nº 596/2014 sobre abuso de mercado y en el artículo 228 del texto refundido de la Ley del Mercado de Valores, aprobado por el Real Decreto Legislativo 4/2015, de 23 de octubre ponemos en su conocimiento el siguiente Hecho Relevante relativo a la sociedad **INKEMIA IUCT GROUP, S.A.** (en adelante “**InKemia**” o “**la Sociedad**” indistintamente).

Dado el avance del proyecto de Biocombustibles Avanzados llevado a cabo por la subsidiaria británica de InKemia, InKemia Advaced BF Ltd, se decidió solicitar a la prestigiosa compañía británica en valoraciones de empresas Hogan Lovells, un informe de valoración del Proyecto empresarial de InKemia Advanced BF Ltd.

Dicho informe, que se adjunta a este hecho relevante, concluye que la valoración estimada siguiendo el método de “discounted residual profit” es de 111,51 millones de euros.

Esta valoración es fruto de la transferencia a esta subsidiaria de la tecnología en Biocombustibles Avanzados desarrollada por el grupo InKemia durante los últimos 15 años. Dicha transferencia incluye la licencia para la explotación de las patentes internacionales que InKemia dispone en esta área.

Este informe refuerza la estrategia presentada en el anterior hecho relevante con respecto al plan de negocio de InKemia.

En Mollet del Vallés a 12 de diciembre de 2017

A handwritten signature in blue ink, appearing to read 'Josep Castells Boliart', written over a horizontal line.

Fdo: Josep Castells Boliart  
Consejero Delegado de 1NKEMIA IUCT GROUP, S.A.

Hogan  
Lovells



# 1nkemia Advanced Biofuel Ltd

## Biofuel Business Valuation – Summary Version

December 2017

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# Executive Summary

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- In accordance with our engagement with Inkemia Advanced Biofuel Ltd ("Inkemia BF"), Hogan Lovells Solutions Transfer Pricing ("we" or "Hogan Lovells") have undertaken an indicative valuation of the intangible property ("IP"), including patents, trademarks, copyrights, manufacturing processes and other IP (collectively "the IP"), relating to the Inkemia BF business.
- This indicative valuation is for the purpose of supporting management with internal discussions and considering options to exploit IP through licensing, commercialisation or a potential sale in the future. Should a sale be considered we can provide further advice regarding the tax valuation and transfer pricing implications of that sale. The report is a summary version of our full analysis, to be issued mid-December 2017.
- The application of a discounted residual profit methodology produced an indicative valuation of **EUR 111.51 million**.
- A sensitivity analysis of the various key data inputs to the methodology produced an interquartile range of possible values of **EUR 72.72 million to EUR 161.61 million**, which encompasses the indicative value of EUR 111.51million.
- The application of a supporting discounted royalty methodology produced a supporting valuation of EUR 109.08 million, falling within the sensitivity range and corroborating the indicative valuation of EUR 111.51 million.
- The valuation relies upon facts and information provided by management and employees of Inkemia BF and its related entities, particularly forecast data. No independent verification has been sought to validate this information. Consequently, the description of facts and circumstances in this document reflects our understanding of the situation at the time of our information gathering. The management of Inkemia BF has reviewed this report and confirmed that there are no material misunderstandings or misrepresentations of the facts gathered during its preparation.
- Our analysis also uses information obtained from third party sources. We have used our knowledge and experience to assess as far as is reasonably possible the reliability and accuracy of such third party data, but are unable to guarantee its accuracy.

# Introduction

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- 1nkemia BF is looking to value the IP related to the 1nkemia BF business.
- To do this, it is necessary to calculate the value that a third party buyer would assign to the IP, were it to purchase the IP in an arm's length scenario (i.e. where the buyer is wholly independent from the seller and therefore regular market forces apply to the transaction).
- The value can be calculated using methodology that assesses the potential value of the IP to the buyer, being the potential profit that could be derived by the buyer in its future use of the IP.

# Proposed Methodology - Overview

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A discounted residual profit methodology has been used to establish an indicative value for the Inkemia BF IP, which operates as follows:

1. The total system profit for the Inkemia Biofuel business is calculated by:
  - a) Extrapolating forecast production volumes and selling prices to generate top-line system revenue.
  - b) Reducing revenue for operating expenses, including returns for the routine functions being performed in the Inkemia BF's business supply chain, namely:
    - Manufacturing (remunerated at Total Costs + 8.5%)
    - Distribution (remunerated at 2% of revenue)
    - Head office/management ("HQ") activities (remunerated at Total Costs + 5%)

More detail regarding forecast production volumes, prices and expenses is included at Appendix A

# Proposed Methodology - Overview

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2. Residual profit is calculated as the portion of total system profit remaining after the allocation of a return to each routine function.
3. The total IP value is calculated based on two components of discounted residual profit:
  - a) Present value of the forecast residual profit for the period forecast until 2028 – this is calculated by discounting the residual profit stream 2017 – 2028 back to present value using the estimated Weighted Average Cost of Capital ("WACC").
  - b) Present value of the residual profit beyond 2028, being the year in which the Inkemia BF business is expected to have completed construction of plants/reached target production capacity (referred to as the "terminal value") – this is calculated by discounting the final year of forecast residual profit back to present value using the differential between the WACC and the terminal growth rate.

# Proposed Methodology – Inputs to System Profit Calculation

Input	Comment
<b>Revenue</b>	Revenue has been estimated using the revenue forecast for the SINES plant (an example of a plant with capacity < 100 MT) and for a larger plant (> 100 MT capacity). The average price per MT for each of the examples has then been applied to the capacity of the Inkemia BF business as it is forecast to increase over the next 10 years (i.e. as additional plants are constructed and become operational).
<b>Costs</b>	Similar to above, the forecast expense profile SINES plant and larger plant examples were used to calculate the average operating costs per MT (for variable costs) and per plant (for fixed costs) as the capacity of the Inkemia BF business increases over the next 10 years. The forecast cost of centralised head office/management activities has also been included as a fixed overhead cost.
<b>Growth rate</b>	A general growth rate of 2.5% has been used, which broadly aligns with currently European CPI. This growth rate feeds into the model at various points, most importantly as the terminal value growth rate (i.e. the growth of the business once the ramp-up period of constructing new plants is finished, which is forecast to be 2028).
<b>WACC</b>	<p>The base WACC of 10.1% used is the average industry WACC for European companies operating in the Specialised Chemicals industry. This industry was considered to be the most appropriate given that, unlike traditional oil, gas and mining companies, Inkemia is not exposed to the same exploration risk – the feedstock used to for the Inkemia BF business is already established (unlike tradition oil, gas and mining business, that have to explore and secure feasible resource reserves before production commences).</p> <p>This base WACC is then increased by a "risk premium" to 20.2% to account for 1) the additional risk associated with the IP as an isolated asset as opposed to as part of a complete business and 2) the additional risk of the Inkemia BF business being in its start-up phase, as opposed to a business that is already operational/established in the industry.</p>
<b>Manufacturing mark-up</b>	A mark-up of 8.5% on the total costs of manufacturing has been used to remunerate the manufacturing activities in the supply chain, based on a benchmarking of EU companies performing comparable manufacturing activities (see Appendix B). The total costs of manufacturing include an allocation of HQ expenses and depreciation costs.
<b>Distribution return</b>	A return of 2% on sales has been used to remunerate the distribution activities in the supply chain, based on a benchmarking of EU companies performing comparable distribution activities (see Appendix C).
<b>HQ mark-up</b>	A mark-up of 5% has been applied to any HQ costs not related to distribution (e.g. sales, marketing) and not allocated to manufacturing. This 5% is in line with EU guidance on the mark-up that should be applied to intragroup services.



# Proposed Methodology – Discounted Value

An indicative valuation of EUR 111.51 million (comprised EUR 45.75 million NPV of the forecast royalty stream and EUR 65.76 million NPV of the terminal value) is calculated as follows:

Discounted Cash Flow Model - Inkemia BIF IP Valuation												
	0 0	1 0	2 0	3 0	4 0	5 0	6 0	7 0	8 0	9 0	10 0	11 0
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Revenue			2,200,363	40,508,246	149,981,357	306,431,211	500,232,524	701,927,429	947,550,591	1,217,439,130	1,518,751,328	1,556,720,111
Manufacturing Expenses	14,583	25,000	1,905,920	34,461,773	126,149,837	255,392,623	416,125,474	582,642,297	784,923,654	1,007,029,238	1,254,769,405	1,286,138,640
Depreciation			106,653	1,915,575	5,683,151	8,366,628	12,316,560	14,377,685	16,801,849	19,354,834	22,095,193	22,095,193
Distribution Expenses	29,000	108,000	108,000	326,224	499,094	644,287	797,290	959,252	1,147,409	1,362,167	1,610,044	1,650,296
HQ Expenses	288,098	2,104,861	2,044,801	3,734,395	5,295,529	6,725,831	8,280,907	9,889,634	11,761,107	13,856,418	16,235,015	16,640,890
Cost of Capex												
	- 331,681	- 2,237,861	- 1,965,011	70,280	12,353,747	35,301,842	62,712,292	94,058,562	132,916,572	175,836,474	224,041,670	230,195,091
Manufacturing Expenses	110,983	420,651	3,953,233	40,078,551	137,108,545	270,468,693	436,707,560	606,893,752	813,469,802	1,040,222,124	1,293,079,168	1,324,853,758
Manufacturing Mark-up	8.5%	9,434	35,755	336,025	3,406,677	11,654,226	22,989,839	37,120,143	51,585,969	69,144,933	88,418,881	109,911,729
Total Distribution Return	2.0%	-	-	44,007	810,165	2,999,627	6,128,624	10,004,650	14,038,549	18,951,012	24,348,783	30,375,027
HQ Return	5.0%	9,585	85,461	5,207	1,660	999	819	769	793	840	918	1,022
Residual (IP Owner) Return	- 341,115	- 2,273,617	- 2,345,043	- 4,146,562	- 2,300,107	6,183,379	15,587,499	28,434,044	44,820,627	63,068,810	83,754,914	86,448,120
WACC	10.1%											
WACC (with Risk Premium)	20.2%											
NPV Residual (IP Owner) Return	45,749,255											
Years until Terminal Value Reached	11.0											
Growth rate at Terminal Value	2.5%											
Terminal Value Residual Stream	-	-	-	-	-	-	-	-	-	-	-	499,488,854.4
NPV Terminal Value	-	-	-	-	-	-	-	-	-	-	-	65,763,839.2
Total IP Value	111,513,094											
Total discounted IP Value	111,513,094											

# Sensitivity Analysis

Although the indicative valuation of EUR 111.51 million is based on an estimation of the parameters that will give the most accurate valuation of the Inkemia BF business, it is also considered prudent to test the sensitivity of the following key inputs into the valuation:

Input	Description	Low	High
<b>Base WACC</b>	Testing the base WACC of 10.2% used in the indicative valuation, using the same risk premium to express the additional risks associated with the stand-alone IP asset and start-up nature of the business (inflating the base WACC by 100%) – e.g. a base WACC of 12% would be adjusted to 24% including the risk premium.	15%	10%
<b>Manufacturing mark-up</b>	Testing the mark-up applied to the cost of manufacturing activities.	5%	9%
<b>Distribution return</b>	Testing the return on sales allocated to distribution activities.	1.5%	2.6%
<b>EBIT</b>	Testing the level of EBIT earned as total system profit. For example, if EBIT is -3% different from the forecast financial data prepared by Inkemia, then the residual profit allocated to the IP owner will be 3% lower of the life of the model.	-3%	3%
<b>Revenue Growth</b>	Testing the growth in revenue over the model, to determine the impact on the valuation if production (and therefore revenue) was lower/higher than the forecast financial data prepared by Inkemia. For example, if production is 80% of the forecast, this will decrease revenue by 20%, and a reduction in variable costs and profit accordingly.	50%	150%

The sensitivity analysis runs 3,125 permutations of the discounted residual profit calculation using different values for the above inputs, and produces an interquartile range of possible values of EUR 72.72 million to EUR 161.61 million (see Appendix D for further detail). We note the range of possible values from this sensitivity analysis is relatively wide as the Inkemia BF business is a new business and it is therefore difficult to tighten assumptions around data inputs as projections are still high-level.

# Supporting Methodology - Overview

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In order to verify that the discounted residual profit methodology used to establish the indicative valuation and perform the sensitivity analysis, a secondary valuation methodology has been applied. A discounted royalty methodology operates follows:

1. An approximate royalty rate verifying the residual profit methodology was determined using the ktMINE IP database to perform a high-level search for royalty agreements relating to similar IP. A similar arrangement for the license of IP was found, with a royalty rate of 4.5% of net sales. This royalty rate is applied to forecast sales revenue to give a notional royalty revenue that could be earned by an IP owner licensing the 1nkemia BF business IP. It should be noted that this is an indicative royalty rate for use in the supporting methodology, and an extended royalty search would be recommended to corroborate a wider range of royalty rates were the discounted royalty methodology to be relied upon as the primary methodology.
2. The cost of maintaining the IP as a stand-alone asset is estimated, based on historic costs related to the IP and the estimated cost of managing the IP.
3. The IP cost is deducted from the notional royalty revenue to give a future stream of royalty profits.
4. Similar to the discounted residual profit methodology, the IP value is comprised the present value of two components of discounted royalty profit:
  - a) the forecast royalty profit; and
  - b) the terminal value.

# Supporting Methodology – Discounted Value

A supporting valuation of EUR 109.08 million (comprised EUR 57.34 million NPV of the forecast royalty stream and EUR 51.74 million NPV of the terminal value) is calculated as follows:

Discounted Cash Flow Model - Inkemia BF IP Valuation												
	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Revenue			2,200,363	40,508,246	149,981,357	306,431,211	500,232,524	701,927,429	947,550,591	1,217,439,130	1,518,751,328	1,556,720,111
Growth rate				1741.0%	270.2%	104.3%	63.2%	40.3%	35.0%	28.5%	24.7%	2.5%
Royalty Revenue	4.5%		99,016	1,822,871	6,749,161	13,789,404	22,510,464	31,586,734	42,639,777	54,784,761	68,343,810	70,052,405
IP Owner Expense		581,260	466,860	360,431	369,442	378,678	388,145	397,849	407,795	417,990	428,439	439,150
IP Owner Demo Plant Cost		1,397,550										
HQ support (1 CEO, 1 CFO, 1 BD)		500,000	512,500	525,313	538,445	551,906	565,704	579,847	594,343	609,201	624,431	640,042
Scientific support		750,000	768,750	787,969	807,668	827,860	848,556	869,770	891,514	913,802	936,647	960,063
Royalty Profit		- 3,228,810 -	1,640,094	140,150	5,033,606	12,030,960	20,708,058	29,739,260	40,746,125	52,843,768	66,354,202	68,013,140
WACC	10.1%											
WACC (with Risk Premium)	20.2%											
IP Premium	100.0%											
NPV Royalty Stream		57,336,084										
Years until Terminal Value Reached	11.0											
Growth rate at Terminal Value	2.5%											
Terminal Value Royalty Stream												392,973,379.9
NPV Terminal Value												51,739,769.4
Total IP Value		109,075,853										
Total discounted IP Value		109,075,853										

This discounted royalty valuation falls within the interquartile range of values determined by the sensitivity analysis performed for the proposed Residual Profit methodology, and therefore further supports the proposed indicative valuation of EUR 111.51 million.

# Conclusion

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Based on the outcome of:

- the proposed valuation methodology;
- sensitivity analysis of the inputs into that methodology; and
- supporting valuation methodology;

the indicative valuation of **EUR 111.51 million** is considered reasonable, based on the forecast financial performance of 1nkemia BF's business.

Should there be a substantial change to the forecast financial performance of 1nkemia BF's business, it would be recommended that this valuation be revisited.

# Appendices

# Appendix A - Business Forecasts

Model Assumptions - Inkemia BF IP Valuation													
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
<b>1. Plants</b>													
# Plants operational			2	4	8	11	15	18	21	24	27	27	
# Plants < MMT			2	4	6	7	8	8	8	8	8	8	
# Plants > MMT			-	-	2	4	7	10	13	16	19	19	
<b>2. Revenue</b>													
Production plants < 100 /MT		€	1,035	€ 1,415	€ 1,451	€ 1,487	€ 1,524	€ 1,562	€ 1,601	€ 1,641	€ 1,682	€ 1,724	
Production plants > 100 /MT		€	1,140	€ 1,558	€ 1,597	€ 1,637	€ 1,678	€ 1,720	€ 1,763	€ 1,807	€ 1,852	€ 1,898	
<b>3. Manufacturing</b>													
Production Inkemia /MT			2,125	28,625	101,125	196,125	310,500	420,500	549,875	686,125	832,375	832,375	
Production plants < 100 /MT			2,125	28,625	78,625	97,375	134,875	134,875	134,875	134,875	134,875	134,875	
Production plants > 100 /MT			-	-	22,500	98,750	175,625	285,625	415,000	551,250	697,500	697,500	
Production plants < 100			17.3% EBITDA										
Feedstock /MT		€	748	€ 1,022	€ 1,048	€ 1,074	€ 1,101	€ 1,129	€ 1,157	€ 1,186	€ 1,215	€ 1,246	
UCO /MT		€	562	€ 768	€ 787	€ 807	€ 827	€ 848	€ 869	€ 891	€ 913	€ 936	
Other /MT		€	186	€ 254	€ 261	€ 267	€ 274	€ 281	€ 288	€ 295	€ 302	€ 310	
Variable Overhead /MT		€	99	€ 136	€ 139	€ 142	€ 146	€ 150	€ 153	€ 157	€ 161	€ 165	
Fixed Overhead /Plant	€	14,583	€ 25,000	€ 52,725	€ 328,868	€ 337,089	€ 345,516	€ 354,154	€ 363,008	€ 372,083	€ 381,385	€ 390,920	€ 400,693
Production plants > 100			18.4% EBITDA										
Feedstock /MT		€	846	€ 1,156	€ 1,185	€ 1,215	€ 1,245	€ 1,277	€ 1,308	€ 1,341	€ 1,375	€ 1,409	
UCO /MT		€	664	€ 908	€ 930	€ 954	€ 978	€ 1,002	€ 1,027	€ 1,053	€ 1,079	€ 1,106	
Other /MT		€	182	€ 249	€ 255	€ 261	€ 268	€ 274	€ 281	€ 288	€ 296	€ 303	
Variable Overhead /MT		€	78	€ 107	€ 110	€ 113	€ 115	€ 118	€ 121	€ 124	€ 127	€ 130	
Fixed Overhead /Plant	€	14,583	€ 25,000	€ 82,236	€ 812,849	€ 833,170	€ 853,999	€ 875,349	€ 897,233	€ 919,664	€ 942,655	€ 966,222	€ 990,377
<b>4. Depreciation</b>													
Production plants < 100 /MT		€	50	€ 67	€ 67	€ 67	€ 67	€ 67	€ 67	€ 67	€ 67	€ 67	
Production plants > 100 /MT		€	14	€ 19	€ 19	€ 19	€ 19	€ 19	€ 19	€ 19	€ 19	€ 19	

# Appendix B – Manufacturing Benchmarking Process

<b>Product name</b>	Orbis	
<b>Update number</b>	164	
<b>Software version</b>	129.00	
<b>Data update</b>	06/10/2017 (n° 16403)	
		<b>Search result</b>
<b>1. All companies</b>		232,938,955
<b>2. Status: Active companies</b>		180,380,368
<b>3. BvD Independence indicator: A+, A, A-</b>		3,275,757
<b>4. World region/Country/Region in country: Africa, Eastern Europe, Middle East, Western Europe</b>		1,132,477
<b>5. NACE Rev. 2 (Primary codes only): 19 - Manufacture of coke and refined petroleum products, 20 - Manufacture of chemicals and chemical products, 24 - Manufacture of basic metals</b>		3,299
<b>6. Trade description given in English, Description and history, National activity labels, Products and servicesZephyr business description, Overview (All sections): Manufacture or Manufacturing</b>		2391
<b>6.a Further refine industries to 19 - Manufacture of coke and refined petroleum products, 20.13/14 - Manufacture of organic and inorganic basic chemicals, 20.15 - Manufacture of fertiliser and nitrogen compounds, 20.20 - Manufacture of pesticides and other agrochemical products</b>		534
<b>7 Remove all companies with no financial data for 2015/16</b>		202
<b>8 Remove all companies with an insignificant financial result (i.e 1,000 EUR) for 2012 - 2017</b>		181
<b>9 Filter for companies with total revenue 2013 - 2016 of &gt; 5million EUR and &lt; 5billion EUR</b>		112
<b>10 Filter for companies with insufficient trade information</b>		25
<b>11 Manual filter for functional comparability</b>		8
<b>12 Remove companies with sustained (3 out of 5 years) losses</b>		5
	<b>Total # comparables</b>	<b>5</b>



# Appendix B – Manufacturing Benchmarking Results

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<b>Minimum</b>	1.13%
<b>Lower Quartile</b>	4.97%
<b>Median</b>	5.40%
<b>Upper Quartile</b>	8.50%
<b>Maximum</b>	8.99%
<b>Observations</b>	5

# Appendix C – Distribution Benchmarking Process

<b>Product name</b>	Orbis	
<b>Update number</b>	164	
<b>Software version</b>	129.00	
<b>Data update</b>	06/10/2017 (n° 16403)	
		<b>Search result</b>
1. All companies		232,938,955
2. Status: Active companies		180,380,368
3. BvD Independence indicator: A+, A, A-		3,275,757
4. World region/Country/Region in country: Africa, Eastern Europe, Middle East, Western Europe		1,132,477
5. NACE Rev. 2 (Primary codes only): 467 - Other specialised wholesale		14,237
6. Trade description given in English, Description and history, National activity labels, Products and servicesZephyr business description, Overview (All sections): Distribution or selling or sale or sales		2,754
6a. Further refine industries to 4671 - Wholesale of solid, liquid and gaseous fuels and related fuels		1237
7 Remove all companies with no financial data for 2015/16		179
8 Remove all companies with an insignificant financial result (i.e 1,000 EUR) for 2012 - 2017		164
9 Filter for companies with total revenue 2012 - 2016 of > 5million EUR and < 5billion EUR (i.e average of 1million/1billion per year)		117
10 Filter for companies with insufficient trade information		105
11 Manual filter for functional comparability		84
12 Manual filter for product comparability		75
13 Remove companies with no financial information for 3 out of 5 years		71
14 Remove companies with sustained (3 out of 5 years) losses		58
15 Remove companies with outlier results (indicating not functionally comparable)		57
	<b>Total # comparables</b>	57

# Appendix C – Distribution Benchmarking Results

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<b>Minimum</b>	0.02%
<b>Lower Quartile</b>	0.62%
<b>Median</b>	1.53%
<b>Upper Quartile</b>	2.55%
<b>Maximum</b>	14.40%
<b>Observations</b>	57

# Appendix D – Sensitivity Test Output

Sensitivity Analysis - Inkemia BF IP Valuation						
	BASE	LOW	HIGH	STEPS	SIZE	START
WACC	10.12%	10.00%	12.00%	5	0.50%	9.50%
Manufacturing mark-up	8.50%	5.0%	8.5%	5	0.88%	4.1%
Distribution return	2.5%	1.5%	2.6%	5	0.28%	1.2%
EBIT target	0%	-3%	3%	5	1.50%	-4.5%
Revenue growth	100%	50%	150%	5	25.00%	25.0%
Permutations	3,125		Counter	3125		
<b>Lower Quartile</b>		72,720,055			<a href="#">Run Sensitivity - Royalty Method</a>	
<b>Median</b>		119,151,395				
<b>Upper Quartile</b>		161,617,628				