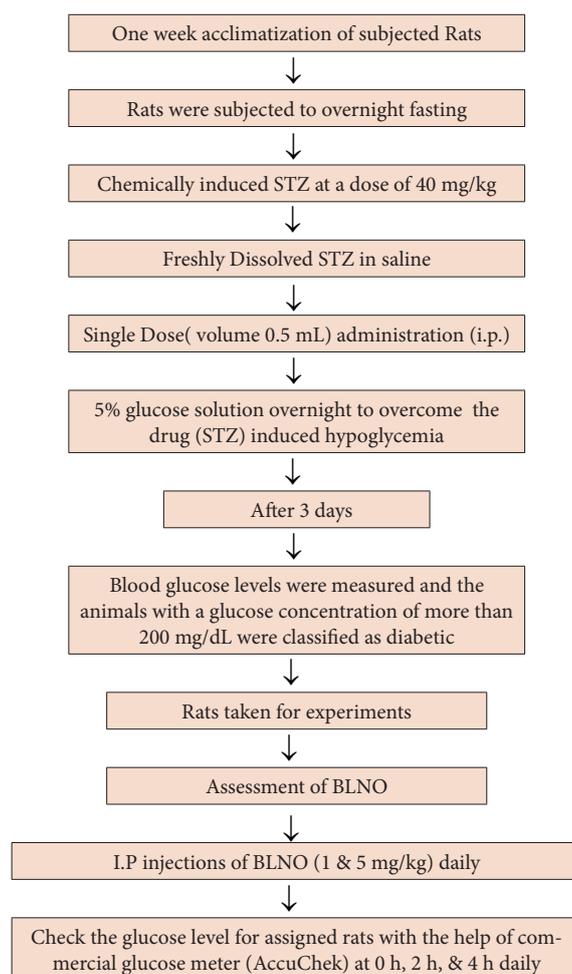


## Supporting Information

### Animal study

#### Experimental protocol

This study was approved by the Institutional Animal Ethics Committee dated 4 April 2014 at Virchow Biotech Pvt. Ltd., Hyderabad. Healthy Wistar rats of both male and female (6-8weeks old) were procured from Sainath Agencies, Hyderabad. Groups of two rats were housed in polypropylene cages. The temperature and humidity was maintained at  $22\pm 3$  °C and 30-70% RH. Illumination was controlled to give a sequence of 12 h light and 12 h dark cycle. All animals were provided with laboratory rodent feed and drinking water treated with ultraviolet light ad libitum.



Group <sup>a</sup>	Blood Glucose level (mg/dL)										
	Initial day	1 <sup>st</sup> day	3 <sup>rd</sup> day	6 <sup>th</sup> day	9 <sup>th</sup> day	12 <sup>th</sup> day	15 <sup>th</sup> day	18 <sup>th</sup> day	21 <sup>st</sup> day	24 <sup>th</sup> day	27 <sup>th</sup> day
I (Control)	95 ± 8.4	425 ± 32.6	524 ± 18.5	538 ± 19.2	551 ± 17.9	565 ± 16.6	570 ± 25.4	585 ± 34.7	588 ± 19.6	593 ± 14.4	595 ± 14.7
II (Male rats BLNO)	97 ± 4.3	384 ± 30.5	341 ± 16.7	290 ± 15.1	240 ± 17.8	191 ± 7.3	146 ± 6.4	108 ± 9.5	94 ± 4.6	95 ± 6.8	92 ± 4.7
III (Male rats CLNO)	91 ± 5.3	376 ± 15.6	319 ± 18.8	268 ± 7.4	209 ± 15.7	165 ± 4.6	131 ± 8.5	99 ± 5.2	94 ± 8.4	93 ± 7.8	88 ± 4.6
IV (Female rats BLNO)	96 ± 3.3	375 ± 32.6	340 ± 23.7	291 ± 16.4	280 ± 13.8	189 ± 14.9	149 ± 7.4	111 ± 5.7	97 ± 9.8	94 ± 2.6	90 ± 3.5
V (Female rats CLNO)	99 ± 7.4	385 ± 19.1	321 ± 16.6	269 ± 4.8	210 ± 13.9	162 ± 5.6	127 ± 9.9	89 ± 8.3	93 ± 4.8	92 ± 3.6	90 ± 5.7

<sup>a</sup> Groups are defined in Experimental section.

\*\*\*\*. The mean difference is significant at the 0.0001 level

**Table S1:** Effect of BLNO and CLNO at 1X dose (1 mg/kg) on blood glucose levels in STZ induced diabetic Wistar rats

Group <sup>a</sup>	Blood Glucose level (mg/dL)							
	Initial day	1 <sup>st</sup> day	3 <sup>rd</sup> day	6 <sup>th</sup> day	9 <sup>th</sup> day	12 <sup>th</sup> day	15 <sup>th</sup> day	18 <sup>th</sup> day
I (Control 3M+3F)	95 ± 8.3	406 ± 32.9	472 ± 18.4	528 ± 19.8	556 ± 17.6	559 ± 16.4	561 ± 25.1	578 ± 34.5
II (Male rats BLNO)	96 ± 8.7	379 ± 27.8	306 ± 29.4	213 ± 34.6	127 ± 18.8	89 ± 9.7	92 ± 9.3	92 ± 6.8
III (Male rats CLNO)	97 ± 4.6	385 ± 34.7	302 ± 24.6	212 ± 18.8	117 ± 13.6	87 ± 8.4	92 ± 9.1	94 ± 7.2
IV (Female rats BLNO)	92 ± 7.5	391 ± 38.5	311 ± 25.6	216 ± 36.8	128 ± 13.9	87 ± 9.6	90 ± 11.9	92 ± 7.4
V (Female rats CLNO)	95 ± 3.8	386 ± 23.4	301 ± 22.5	214 ± 19.6	122 ± 14.8	91 ± 11.9	90 ± 8.4	95 ± 9.3

<sup>a</sup> Groups are defined in Experimental section.

\*\*\*\*. The mean difference is significant at the 0.0001 level

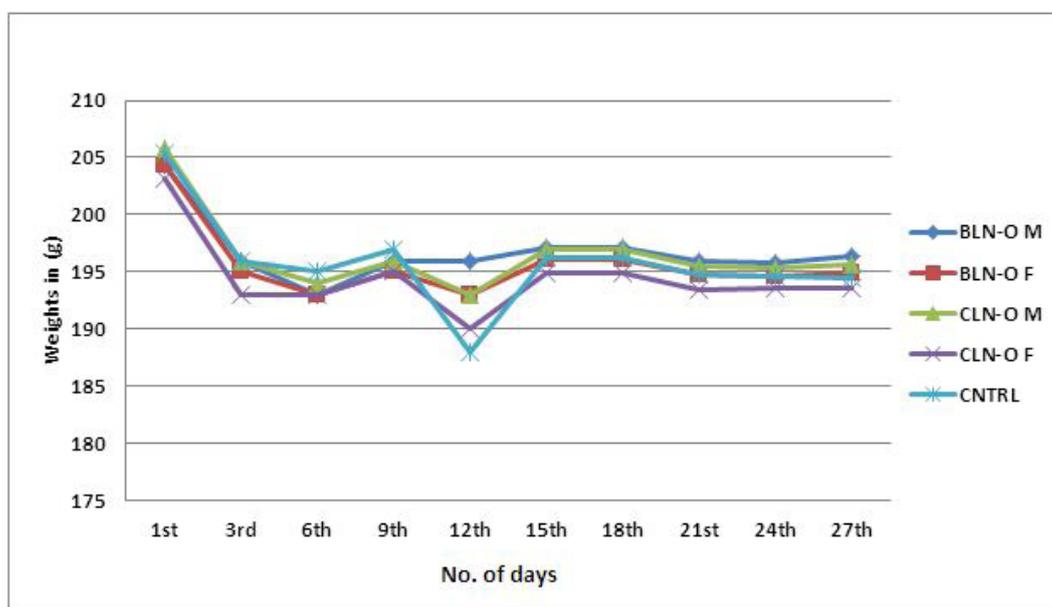
**Table S2:** Effect of BLNO and CLNO at 5X dose (5 mg/kg) on blood glucose levels in STZ induced diabetic Wistar rats

Group <sup>a</sup>	Blood Glucose level (mg/dL)							
	0 min	15 min	30 min	45 min	60 min	90 min	120 min	
I (Control 3M+3F)	89 ± 6.3	209 ± 5.1	180 ± 5.5	130 ± 5.3	118 ± 7.8	105 ± 4.1	98 ± 6.3	
II (MHCL 100 mpk)	93 ± 4.8	112 ± 3.5	157 ± 6.5	132 ± 4.4	112 ± 5.5	104 ± 6.1	90 ± 4.9	
III (SPMH 100 mpk)	91 ± 5.7	182 ± 7	117 ± 4.2	112 ± 6.2	131 ± 5.1	102 ± 4.3	90 ± 5	
IV (BLNO 5 mpk)	88 ± 9.6	117 ± 7	139 ± 8	156 ± 5.6	140 ± 6	115 ± 7.5	106 ± 8.1	
V (CLNO 5 mpk)	91 ± 4.9	135 ± 5.3	157 ± 5.8	120 ± 6.5	103 ± 7.5	102 ± 5.3	90 ± 9.9	

<sup>a</sup> Groups are defined in Experimental section.

\*. The mean difference is significant at the 0.05 level.

**Table S3:** Effect of BLNO and CLNO on oral glucose tolerance test



**Figure S1:** Average body weight of Wistar rats at 1X dose over 28 days

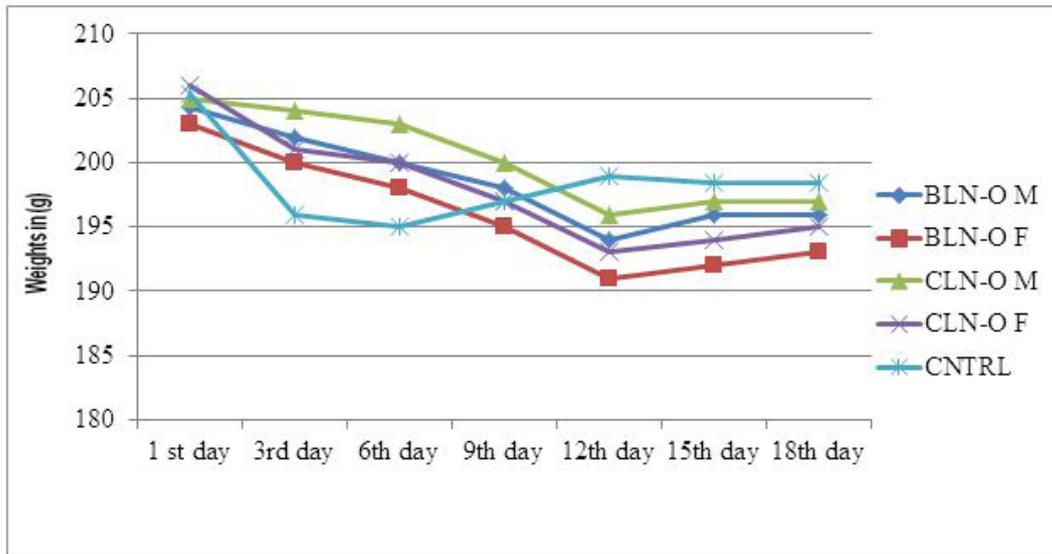


Figure S2: Average body weight of Wistar rats at 5X dose over 18 days