

## S1 File. Datasets for Patients' characteristics analysis and experimental studies.

Table A. General Characteristics of Study Subjects.

Descriptives									
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	
					Lower Bound	Upper Bound			
Age	1.00	30	50.5333	18.58760	3.39362	43.5926	57.4741	17.00	78.00
	2.00	34	55.4706	9.05283	1.55255	52.3119	58.6293	36.00	70.00
	3.00	31	58.7097	11.23445	2.01777	54.5888	62.8305	31.00	75.00
	4.00	25	58.2400	11.56244	2.31249	53.4673	63.0127	29.00	75.00
	Total	120	55.6500	13.27261	1.21162	53.2509	58.0491	17.00	78.00
BMI	1.00	30	23.3667	2.96128	.54065	22.2609	24.4724	17.60	27.50
	2.00	34	22.7659	3.01005	.51622	21.7156	23.8161	19.30	30.40
	3.00	31	24.1642	3.98706	.71610	22.7017	25.6267	16.90	32.40
	4.00	25	23.9920	2.58456	.51691	22.9251	25.0589	20.30	28.70
	Total	120	23.5328	3.21365	.29336	22.9519	24.1136	16.90	32.40
TG	1.00	30	4.7287	.76915	.14043	4.4415	5.0159	3.49	6.10
	2.00	34	4.9429	1.21198	.20785	4.5201	5.3658	3.28	8.32
	3.00	31	4.6881	1.31165	.23558	4.2069	5.1692	2.90	8.72
	4.00	25	4.8768	1.12112	.22422	4.4140	5.3396	3.07	6.85
	Total	120	4.8098	1.11815	.10207	4.6076	5.0119	2.90	8.72
TCH	1.00	30	1.9760	.95567	.17448	1.6191	2.3329	.84	4.51
	2.00	34	1.5229	.81491	.13976	1.2386	1.8073	.13	3.25
	3.00	31	1.7187	1.39498	.25055	1.2070	2.2304	.54	8.26
	4.00	25	1.9488	.91180	.18236	1.5724	2.3252	.76	4.29
	Total	120	1.7755	1.04904	.09576	1.5859	1.9651	.13	8.26
HDL	1.00	30	1.0760	.22074	.04030	.9936	1.1584	.71	1.49
	2.00	34	1.3571	.73565	.12616	1.1004	1.6137	.72	3.97
	3.00	31	1.1161	.20402	.03664	1.0413	1.1910	.75	1.43
	4.00	25	1.1788	.29655	.05931	1.0564	1.3012	.63	1.86
	Total	120	1.1874	.45041	.04112	1.1060	1.2688	.63	3.97
LDL	1.00	30	2.8107	.85423	.15596	2.4917	3.1296	1.35	4.36
	2.00	34	2.6476	.69178	.11864	2.4063	2.8890	1.28	3.67
	3.00	31	2.7126	1.03199	.18535	2.3340	3.0911	.65	5.56
	4.00	25	2.8444	.98573	.19715	2.4375	3.2513	1.19	4.86
	Total	120	2.7462	.88382	.08068	2.5864	2.9059	.65	5.56
TGHDL	1.00	30	4.4653	1.07726	.19668	4.0631	4.8676	2.77	6.80
	2.00	34	4.0106	1.01592	.17423	3.6561	4.3651	2.09	5.87
	3.00	31	4.2519	1.08936	.19566	3.8524	4.6515	2.53	6.97
	4.00	25	4.3308	1.34630	.26926	3.7751	4.8865	1.65	6.43
	Total	120	4.2533	1.12391	.10260	4.0502	4.4565	1.65	6.97
TCHLDL	1.00	30	2.0567	1.55706	.28428	1.4752	2.6381	.32	6.42
	2.00	34	1.4418	.93797	.16086	1.1145	1.7690	.03	3.95
	3.00	31	1.5561	1.22196	.21947	1.1079	2.0043	.38	6.60
	4.00	25	1.7516	1.12976	.22595	1.2853	2.2179	.47	6.16
	Total	120	1.6896	1.23516	.11275	1.4663	1.9128	.03	6.60
HbA1C	1.00	30	4.8400	.73607	.13439	4.5651	5.1149	3.90	5.90
	2.00	34	8.0800	1.82028	.31218	7.4449	8.7151	5.16	11.17
	3.00	31	9.6016	2.30797	.41452	8.7550	10.4482	6.25	16.89
	4.00	25	8.3484	2.00755	.40151	7.5197	9.1771	4.48	12.00
	Total	120	7.7190	2.51791	.22985	7.2639	8.1741	3.90	16.89
Glucose	1.00	30	4.5533	.63286	.11554	4.3170	4.7896	3.90	6.10
	2.00	34	8.8159	2.75633	.47271	7.8542	9.7776	5.20	14.80
	3.00	31	13.9323	6.04987	1.08659	11.7131	16.1514	4.40	32.40
	4.00	25	12.5124	6.53420	1.30684	9.8152	15.2096	3.84	29.00
	Total	120	9.8421	5.76637	.52639	8.7998	10.8844	3.84	32.40
VCAM1	1.00	30	10055.4667	1130.68267	206.43347	9633.2628	10477.6705	7668.00	11573.00
	2.00	34	14789.0000	3486.56702	597.94131	13572.4793	16005.5207	10876.00	25001.00
	3.00	31	18362.4516	4686.16621	841.66030	16643.5520	20081.3513	1293.00	29080.00
	4.00	25	23835.5200	3061.85476	612.37095	22571.6485	25099.3915	19894.00	29319.00
	Total	120	16413.4500	5883.60867	537.09753	15349.9432	17476.9568	1293.00	29319.00
CTRP3	1.00	30	187.2467	51.91381	9.47812	167.8617	206.6316	81.21	289.00
	2.00	34	142.3118	13.80553	2.36763	137.4948	147.1287	123.60	170.30
	3.00	31	120.9226	30.68758	5.51165	109.6663	132.1789	83.80	199.30
	4.00	25	76.8308	18.20502	3.64100	69.3161	84.3455	50.00	119.30
	Total	120	134.3781	49.79363	4.54552	125.3775	143.3787	50.00	289.00
CTRP5	1.00	30	486.1320	88.13295	16.09080	453.2226	519.0414	370.62	685.03
	2.00	34	288.0394	20.63971	3.53968	280.8379	295.2409	245.56	332.24
	3.00	31	251.5235	52.89726	9.50063	232.1207	270.9264	164.89	407.45
	4.00	25	231.5872	39.46098	7.89220	215.2985	247.8759	109.49	296.07
	Total	120	316.3684	114.58922	10.46052	295.6555	337.0813	109.49	685.03

### Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Male is the same across categories of Group.	Independent-Samples Kruskal-Wallis Test	.650	Retain the null hypothesis.
2	The distribution of Hypertension is the same across categories of Group.	Independent-Samples Kruskal-Wallis Test	.340	Retain the null hypothesis.
3	The distribution of Diabeticnephropathy is the same across categories of Group.	Independent-Samples Kruskal-Wallis Test	.000	Reject the null hypothesis.
4	The distribution of Age is the same across categories of Group.	Independent-Samples Kruskal-Wallis Test	.187	Retain the null hypothesis.
5	The distribution of BMI is the same across categories of Group.	Independent-Samples Kruskal-Wallis Test	.224	Retain the null hypothesis.
6	The distribution of TG is the same across categories of Group.	Independent-Samples Kruskal-Wallis Test	.689	Retain the null hypothesis.
7	The distribution of TCH is the same across categories of Group.	Independent-Samples Kruskal-Wallis Test	.077	Retain the null hypothesis.
8	The distribution of HDL is the same across categories of Group.	Independent-Samples Kruskal-Wallis Test	.260	Retain the null hypothesis.
9	The distribution of LDL is the same across categories of Group.	Independent-Samples Kruskal-Wallis Test	.892	Retain the null hypothesis.
10	The distribution of TGHDL is the same across categories of Group.	Independent-Samples Kruskal-Wallis Test	.543	Retain the null hypothesis.
11	The distribution of TCHLDL is the same across categories of Group.	Independent-Samples Kruskal-Wallis Test	.148	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Table B. Correlation between DR and laboratory characteristics

**Variables in the Equation**

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
							Lower	Upper
Step 1 <sup>a</sup>	Age	.032	.015	4.683	1	.030	1.033	1.003
	Constant	-1.937	.860	5.077	1	.024	.144	1.063

a. Variable(s) entered on step 1: Age.

**Variables in the Equation**

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
							Lower	Upper
Step 1 <sup>a</sup>	Male	-.244	.368	.438	1	.508	.784	.381
	Constant	.000	.272	.000	1	1.000	1.000	1.613

a. Variable(s) entered on step 1: Male.

**Variables in the Equation**

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
							Lower	Upper
Step 1 <sup>a</sup>	Hypertension	.376	.458	.674	1	.412	1.457	.593
	Constant	-.209	.205	1.038	1	.308	.811	3.576

a. Variable(s) entered on step 1: Hypertension.

**Variables in the Equation**

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
							Lower	Upper
Step 1 <sup>a</sup>	BMI	.103	.059	3.086	1	.079	1.109	.988
	Constant	-2.572	1.401	3.367	1	.067	.076	1.245

a. Variable(s) entered on step 1: BMI.

**Variables in the Equation**

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
							Lower	Upper
Step 1 <sup>a</sup>	TG	-.057	.165	.118	1	.731	.945	.684
	Constant	.140	.814	.029	1	.864	1.150	1.306

a. Variable(s) entered on step 1: TG.

**Variables in the Equation**

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)		
							Lower	Upper	
Step 1 <sup>a</sup>	TCH	.079	.176	.201	1	.654	1.082	.766	1.528
	Constant	-.274	.362	.571	1	.450	.760		

a. Variable(s) entered on step 1: TCH.

**Variables in the Equation**

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)		
							Lower	Upper	
Step 1 <sup>a</sup>	HDL	-.446	.466	.914	1	.339	.640	.257	1.597
	Constant	.392	.575	.465	1	.495	1.480		

a. Variable(s) entered on step 1: HDL.

**Variables in the Equation**

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)		
							Lower	Upper	
Step 1 <sup>a</sup>	LDL	.061	.208	.086	1	.769	1.063	.707	1.598
	Constant	-.302	.600	.252	1	.615	.740		

a. Variable(s) entered on step 1: LDL.

**Variables in the Equation**

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)		
							Lower	Upper	
Step 1 <sup>a</sup>	TGHDL	.051	.164	.096	1	.757	1.052	.763	1.449
	Constant	-.349	.720	.235	1	.628	.705		

a. Variable(s) entered on step 1: TGHDL.

**Variables in the Equation**

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)		
							Lower	Upper	
Step 1 <sup>a</sup>	TCHLDL	-.058	.150	.148	1	.701	.944	.703	1.267
	Constant	-.036	.312	.013	1	.908	.964		

a. Variable(s) entered on step 1: TCHLDL.

**Variables in the Equation**

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
							Lower	Upper
Step 1 <sup>a</sup>	HbA1C	.501	.102	24.155	1	.000	1.650	1.351 2.015
	Constant	-4.009	.817	24.082	1	.000	.018	

a. Variable(s) entered on step 1: HbA1C.

**Variables in the Equation**

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
							Lower	Upper
Step 1 <sup>a</sup>	Glucose	.393	.077	26.140	1	.000	1.481	1.274 1.722
	Constant	-3.738	.708	27.880	1	.000	.024	

a. Variable(s) entered on step 1: Glucose.

**Variables in the Equation**

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
							Lower	Upper
Step 1 <sup>a</sup>	Glucose	.393	.077	26.140	1	.000	1.481	1.274 1.722
	Constant	-3.738	.708	27.880	1	.000	.024	

a. Variable(s) entered on step 1: Glucose.

**Variables in the Equation**

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
							Lower	Upper
Step 1 <sup>a</sup>	CTRP3	-.050	.009	28.240	1	.000	.952	.934 .969
	Constant	6.234	1.196	27.148	1	.000	509.667	

a. Variable(s) entered on step 1: CTRP3.

**Variables in the Equation**

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
							Lower	Upper
Step 1 <sup>a</sup>	CTRP5	-.036	.008	19.749	1	.000	.965	.950 .980
	Constant	10.022	2.206	20.640	1	.000	22527.662	

a. Variable(s) entered on step 1: CTRP5.

Table C. Correlation between DR and CTRPs

	B	S.E.	Wald	df	Sig.	Exp(B)	Variables in the Equation	
							Lower	Upper
Age	.018	.033	.277	1	.599	1.018	.953	1.086
HbA1C	.090	.185	.236	1	.627	1.094	.761	1.573
Glucose	.137	.106	1.645	1	.200	1.146	.930	1.412
Step 1 <sup>a</sup>	VCAM1	.000	.000	1.162	1	.281	1.000	1.000
	CTRP3	-.043	.016	7.782	1	.005	.958	.929
	CTRP5	-.016	.009	3.093	1	.079	.984	.966
	Constant	5.209	3.956	1.734	1	.188	182.829	1.002

a. Variable(s) entered on step 1: Age, HbA1C, Glucose, VCAM1, CTRP3, CTRP5.

**Table D. Correlation analysis of variables associated with circulating CTRP3 All, n=120**

		Correlations															
Spearman's rho	Male	Male	Age	BMI	TG	TCH	HDL	LDL	TGHDL	TCHLDL	HbA1C	Glucose	VCAM1	CTRP3	CTRP5	Hypertension	
Spearman's rho	Male	Correlation Coefficient	1.000	.135	.074	.029	.114	-.223*	.060	.172	.075	-.077	-.020	.014	.028	.001	.034
		Sig. (2-tailed)	.	.143	.423	.757	.216	.015	.515	.061	.416	.402	.825	.879	.765	.987	.716
		N	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
Age		Correlation Coefficient	.135	1.000	.111	.277**	.058	.061	.229*	.050	-.196*	.151	.246**	.205*	-.014	-.237**	.012
		Sig. (2-tailed)	.143	.	.227	.002	.527	.510	.012	.586	.032	.099	.007	.025	.883	.009	.896
		N	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
BMI		Correlation Coefficient	.074	.111	1.000	.103	.212*	-.158	.116	.249**	.173	-.027	.049	.002	.026	.049	-.142
		Sig. (2-tailed)	.423	.227	.	.263	.020	.085	.207	.006	.059	.767	.593	.981	.779	.595	.123
		N	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
TG		Correlation Coefficient	.029	.277**	.103	1.000	.241**	.330**	.827**	.447**	.005	-.124	-.079	-.090	.055	.084	.015
		Sig. (2-tailed)	.757	.002	.263	.	.008	.000	.000	.000	.961	.179	.393	.328	.553	.361	.870
		N	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
TCH		Correlation Coefficient	.114	.058	.212*	.241**	1.000	-.412**	.127	.610**	.736**	-.149	-.093	-.152	.024	.137	-.065
		Sig. (2-tailed)	.216	.527	.020	.008	.	.000	.167	.000	.000	.104	.314	.097	.794	.137	.479
		N	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
HDL		Correlation Coefficient	-.223*	.061	-.158	.330**	-.412**	1.000	.200*	-.607**	-.519**	.030	.083	.051	-.084	-.113	.043
		Sig. (2-tailed)	.015	.510	.085	.000	.000	.	.029	.000	.000	.742	.366	.577	.360	.221	.641
		N	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
LDL		Correlation Coefficient	.060	.229*	.116	.827**	.127	.200*	1.000	.493**	.026	-.098	-.081	-.037	.067	.025	-.111
		Sig. (2-tailed)	.515	.012	.207	.000	.167	.029	.	.000	.776	.286	.382	.686	.466	.786	.229
		N	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
TGHDL		Correlation Coefficient	.172	.050	.249**	.447**	.610**	-.607**	.493**	1.000	.527**	-.054	-.103	-.090	.013	.125	-.070
		Sig. (2-tailed)	.061	.586	.006	.000	.000	.000	.	.000	.555	.262	.327	.888	.175	.449	
		N	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
TCHLDL		Correlation Coefficient	.075	-.196*	.173	.005	.736**	-.519**	.026	.527**	1.000	-.138	-.125	-.160	.007	.173	-.168
		Sig. (2-tailed)	.416	.032	.059	.961	.000	.000	.776	.000	.	.134	.172	.081	.936	.059	.066
		N	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
HbA1C		Correlation Coefficient	-.077	.151	-.027	-.124	-.149	.030	-.098	-.054	-.138	1.000	.750**	.662**	-.445**	-.548**	.058
		Sig. (2-tailed)	.402	.099	.767	.179	.104	.742	.286	.555	.134	.	.000	.000	.000	.000	.531
		N	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
Glucose		Correlation Coefficient	-.020	.246**	.049	-.079	-.093	.083	-.081	-.103	-.125	.750**	1.000	.717**	-.500**	-.676**	-.017
		Sig. (2-tailed)	.825	.007	.593	.393	.314	.366	.382	.262	.172	.000	.	.000	.000	.000	.850
		N	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
VCAM1		Correlation Coefficient	.014	.205*	.002	-.090	-.152	.051	-.037	-.090	-.160	.662**	.717**	1.000	-.707**	-.764**	.191*
		Sig. (2-tailed)	.879	.025	.981	.328	.097	.577	.686	.327	.081	.000	.000	.	.000	.000	.037
		N	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
CTRP3		Correlation Coefficient	.028	-.014	.026	.055	.024	-.084	.067	.013	.007	-.445**	-.500**	-.707**	1.000	.637**	-.013
		Sig. (2-tailed)	.765	.883	.779	.553	.794	.360	.466	.888	.936	.000	.000	.000	.	.000	.889
		N	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
CTRP5		Correlation Coefficient	.001	-.237**	.049	.084	.137	-.113	.025	.125	.173	-.548**	-.676**	-.764**	.637**	1.000	-.057
		Sig. (2-tailed)	.987	.009	.595	.361	.137	.221	.786	.175	.059	.000	.000	.000	.	.537	
		N	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
Hypertension		Correlation Coefficient	.034	.012	-.142	.015	-.065	.043	-.111	-.070	-.168	.058	-.017	.191*	-.013	-.057	1.000
		Sig. (2-tailed)	.716	.896	.123	.870	.479	.641	.229	.449	.066	.531	.850	.037	.889	.537	.
		N	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

**Table E. Correlation analysis of variables associated with circulating CTRP3 T2DM, n=90**

Correlations																		
Spearman's rho	Male	Male	Age	BMI	TG	TCH	HDL	LDL	TGHDL	TCHLDL	HbA1C	Glucose	VCAM1	CTRP3	CTRP5	Hypertension		
Spearman's rho	Male	Correlation Coefficient	1.000	-.100	-.009	-.134	-.059	-.160	-.056	.015	.057	-.046	.037	.068	-.054	-.037	.071	
		Sig. (2-tailed)		.351	.933	.209	.580	.131	.602	.892	.591	.668	.730	.526	.613	.730	.503	
		N	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	
Age	Age	Correlation Coefficient	-.100	1.000	.044	.098	-.034	.095	.067	-.085	-.096	.057	.309**	.174	-.028	-.155	-.032	
		Sig. (2-tailed)		.351		.678	.357	.752	.374	.533	.428	.367	.594	.003	.102	.796	.145	.765
		N	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	
BMI	BMI	Correlation Coefficient	-.009	.044	1.000	.058	.186	-.131	.060	.221*	.170	-.091	.071	-.055	-.047	.104	-.139	
		Sig. (2-tailed)		.933	.678		.588	.080	.218	.574	.036	.110	.394	.504	.606	.658	.328	.190
		N	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	
TG	TG	Correlation Coefficient	-.134	.098	.058	1.000	.214*	.383**	.806**	.450**	.062	-.188	-.080	-.126	-.041	.147	.029	
		Sig. (2-tailed)		.209	.357	.588		.043	.000	.000	.000	.559	.076	.453	.237	.702	.167	.787
		N	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	
TCH	TCH	Correlation Coefficient	-.059	-.034	.186	.214*	1.000	-.333**	.175	.580**	.902**	-.060	.028	-.056	-.165	.063	-.124	
		Sig. (2-tailed)		.580	.752	.080	.043		.001	.098	.000	.000	.577	.792	.600	.120	.556	.244
		N	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	
HDL	HDL	Correlation Coefficient	-.160	.095	-.131	.383**	-.333**	1.000	.151	-.565**	-.605**	-.107	-.055	-.068	.016	-.008	.148	
		Sig. (2-tailed)		.131	.374	.218	.000	.001		.157	.000	.000	.317	.605	.527	.882	.943	.165
		N	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	
LDL	LDL	Correlation Coefficient	-.056	.067	.060	.806**	.175	.151	1.000	.587**	.099	-.147	-.057	-.011	-.058	.000	-.099	
		Sig. (2-tailed)		.602	.533	.574	.000	.098	.157	.000	.000	.351	.167	.595	.917	.586	.998	.354
		N	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	
TGHDL	TGHDL	Correlation Coefficient	.015	-.085	.221*	.450**	.580**	-.565**	.587**	1.000	.670**	.010	-.004	-.039	-.116	.109	-.168	
		Sig. (2-tailed)		.892	.428	.036	.000	.000		.000	.	.000	.929	.970	.714	.276	.306	.114
		N	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	
TCHLDL	TCHLDL	Correlation Coefficient	.057	-.096	.170	.062	.902**	-.605**	.099	.670**	1.000	-.037	-.010	-.055	-.086	.059	-.104	
		Sig. (2-tailed)		.591	.367	.110	.559	.000	.000	.351	.000	.	.730	.924	.606	.423	.579	.330
		N	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	
HbA1C	HbA1C	Correlation Coefficient	-.046	.057	-.091	-.188	-.060	-.107	-.147	.010	-.037	1.000	.519**	.328**	-.131	-.045	-.025	
		Sig. (2-tailed)		.668	.594	.394	.076	.577	.317	.167	.929	.730	.	.000	.002	.219	.674	.817
		N	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	
Glucose	Glucose	Correlation Coefficient	.037	.309**	.071	-.080	.028	-.055	-.057	-.004	-.010	.519**	1.000	.474**	-.291**	-.357**	-.130	
		Sig. (2-tailed)		.730	.003	.504	.453	.792	.605	.595	.970	.924	.	.000	.005	.001	.223	
		N	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	
VCAM1	VCAM1	Correlation Coefficient	.068	.174	-.055	-.126	-.056	-.068	-.011	-.039	-.055	.328**	.474**	1.000	-.663**	-.500**	.203	
		Sig. (2-tailed)		.526	.102	.606	.237	.600	.527	.917	.714	.606	.002	.	.000	.000	.055	
		N	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	
CTRP3	CTRP3	Correlation Coefficient	-.054	-.028	-.047	-.041	-.165	.016	-.058	-.116	-.086	-.131	-.291**	-.663**	1.000	.520**	.020	
		Sig. (2-tailed)		.613	.796	.658	.702	.120	.882	.586	.276	.423	.219	.005	.	.000	.000	.851
		N	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	
CTRP5	CTRP5	Correlation Coefficient	-.037	-.155	.104	.147	.063	-.008	.000	.109	.059	-.045	-.357**	-.500**	.520**	1.000	.076	
		Sig. (2-tailed)		.730	.145	.328	.167	.556	.943	.998	.306	.579	.674	.001	.000	.000	.479	
		N	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	
Hypertension	Hypertension	Correlation Coefficient	.071	-.032	-.139	.029	-.124	.148	-.099	-.168	-.104	-.025	-.130	.203	.020	.076	1.000	
		Sig. (2-tailed)		.503	.765	.190	.787	.244	.165	.354	.114	.330	.817	.223	.055	.851	.479	
		N	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	

\*\*. Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

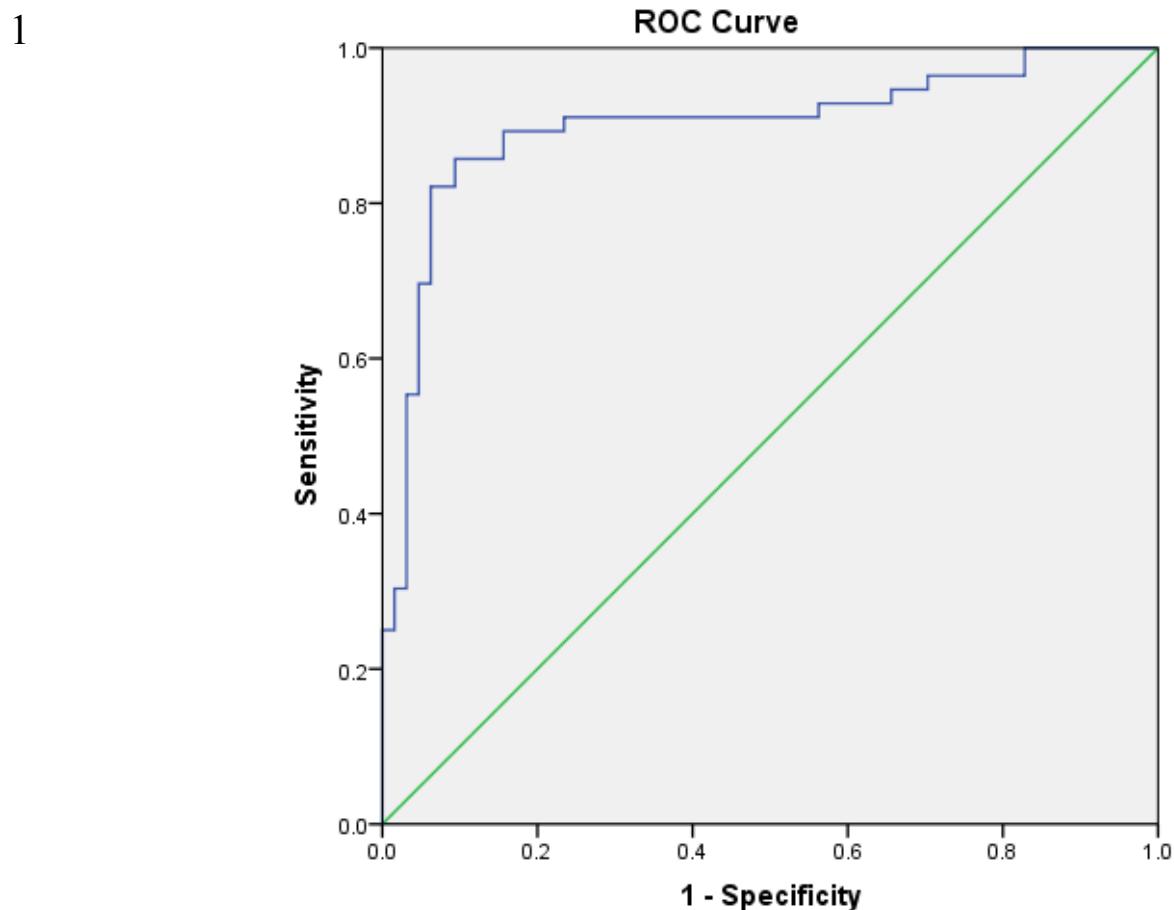
**Table F. Correlation analysis of variables associated with circulating CTRP3 DR, n=56**

		Correlations															
Spearman's rho	Male	Male	Age	BMI	TG	TCH	HDL	LDL	TGHDL	TCHLDL	HbA1C	Glucose	VCAM1	CTRP3	CTRP5	Hypertension	
Spearman's rho	Male	Correlation Coefficient	1.000	-.250	.053	-.105	-.076	-.104	-.044	-.001	.027	-.126	.043	.093	-.045	.004	
		Sig. (2-tailed)	.	.063	.698	.441	.576	.446	.746	.994	.846	.355	.752	.496	.740	.974	
		N	56	56	56	56	56	56	56	56	56	56	56	56	56	56	
Age		Correlation Coefficient	-.250	1.000	.058	.090	.057	.048	.160	-.019	-.013	.018	.306	-.016	.106	-.126	
		Sig. (2-tailed)	.063	.	.672	.507	.674	.725	.238	.892	.924	.893	.022	.905	.436	.356	
		N	56	56	56	56	56	56	56	56	56	56	56	56	56	56	
BMI		Correlation Coefficient	.053	.058	1.000	.055	.255	-.131	.020	.227	.228	-.213	-.027	-.232	.120	.219	
		Sig. (2-tailed)	.698	.672	.	.689	.058	.336	.884	.093	.091	.116	.841	.085	.378	.105	
		N	56	56	56	56	56	56	56	56	56	56	56	56	56	56	
TG		Correlation Coefficient	-.105	.090	.055	1.000	.437**	.241	.941**	.668**	.330*	-.078	-.057	-.117	-.014	-.040	
		Sig. (2-tailed)	.441	.507	.689	.	.001	.073	.000	.000	.013	.566	.677	.392	.921	.772	
		N	56	56	56	56	56	56	56	56	56	56	56	56	56	56	
TCH		Correlation Coefficient	-.076	.057	.255	.437**	1.000	-.241	.278	.555**	.907**	-.147	.071	-.009	-.142	.237	-.064
		Sig. (2-tailed)	.576	.674	.058	.001	.	.073	.038	.000	.000	.281	.602	.947	.295	.078	
		N	56	56	56	56	56	56	56	56	56	56	56	56	56	56	
HDL		Correlation Coefficient	-.104	.048	-.131	.241	-.241	1.000	.197	-.499**	-.492**	.072	-.127	-.035	-.015	-.266*	.118
		Sig. (2-tailed)	.446	.725	.336	.073	.073	.	.147	.000	.000	.597	.351	.795	.910	.048	
		N	56	56	56	56	56	56	56	56	56	56	56	56	56	56	
LDL		Correlation Coefficient	-.044	.160	.020	.941**	.278*	.197	1.000	.641**	.210	-.104	-.067	-.158	.003	-.099	-.157
		Sig. (2-tailed)	.746	.238	.884	.	.000	.038	.147	.	.000	.121	.447	.625	.244	.982	
		N	56	56	56	56	56	56	56	56	56	56	56	56	56	56	
TGHDL		Correlation Coefficient	-.001	-.019	.227	.668**	.555**	-.499**	.641**	1.000	.644**	-.056	.077	-.081	-.072	.221	-.217
		Sig. (2-tailed)	.994	.892	.093	.000	.000	.000	.000	.	.000	.682	.571	.554	.596	.102	
		N	56	56	56	56	56	56	56	56	56	56	56	56	56	56	
TCHLDL		Correlation Coefficient	.027	-.013	.228	.330*	.907**	-.492**	.210	.644**	1.000	-.186	.080	.002	-.101	.235	-.038
		Sig. (2-tailed)	.846	.924	.091	.013	.000	.000	.121	.000	.	.170	.559	.987	.457	.082	
		N	56	56	56	56	56	56	56	56	56	56	56	56	56	56	
HbA1C		Correlation Coefficient	-.126	.018	-.213	-.078	-.147	.072	-.104	-.056	-.186	1.000	.484**	.094	.012	.141	-.034
		Sig. (2-tailed)	.355	.893	.116	.566	.281	.597	.447	.682	.170	.	.000	.491	.928	.300	
		N	56	56	56	56	56	56	56	56	56	56	56	56	56	56	
Glucose		Correlation Coefficient	.043	.306*	-.027	-.057	.071	-.127	-.067	.077	.080	.484**	1.000	.235	-.035	-.172	-.098
		Sig. (2-tailed)	.752	.022	.841	.677	.602	.351	.625	.571	.559	.000	.	.081	.796	.205	
		N	56	56	56	56	56	56	56	56	56	56	56	56	56	56	
VCAM1		Correlation Coefficient	.093	-.016	-.232	-.117	-.009	-.035	-.158	-.081	.002	.094	.235	1.000	-.597**	-.207	.342**
		Sig. (2-tailed)	.496	.905	.085	.392	.947	.795	.244	.554	.987	.491	.081	.	.000	.126	.010
		N	56	56	56	56	56	56	56	56	56	56	56	56	56	56	
CTRP3		Correlation Coefficient	-.045	.106	.120	-.014	-.142	-.015	.003	-.072	-.101	.012	-.035	-.597**	1.000	.168	.054
		Sig. (2-tailed)	.740	.436	.378	.921	.295	.910	.982	.596	.457	.928	.796	.000	.	.217	.695
		N	56	56	56	56	56	56	56	56	56	56	56	56	56	56	
CTRP5		Correlation Coefficient	-.004	-.126	.219	-.040	.237	-.266*	-.099	.221	.235	.141	-.172	-.207	.168	1.000	.085
		Sig. (2-tailed)	.974	.356	.105	.772	.078	.048	.469	.102	.082	.300	.205	.126	.217	.	.533
		N	56	56	56	56	56	56	56	56	56	56	56	56	56	56	
Hypertension		Correlation Coefficient	.023	-.193	-.196	-.082	-.064	.118	-.157	-.217	-.038	-.034	-.098	.342**	.054	.085	1.000
		Sig. (2-tailed)	.868	.155	.147	.546	.639	.387	.248	.108	.781	.803	.472	.010	.695	.533	.
		N	56	56	56	56	56	56	56	56	56	56	56	56	56	56	

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

Fig A. ROC curves, for DR/PDR diagnosis, by circulating CTRP3 level.



**Area Under the Curve**

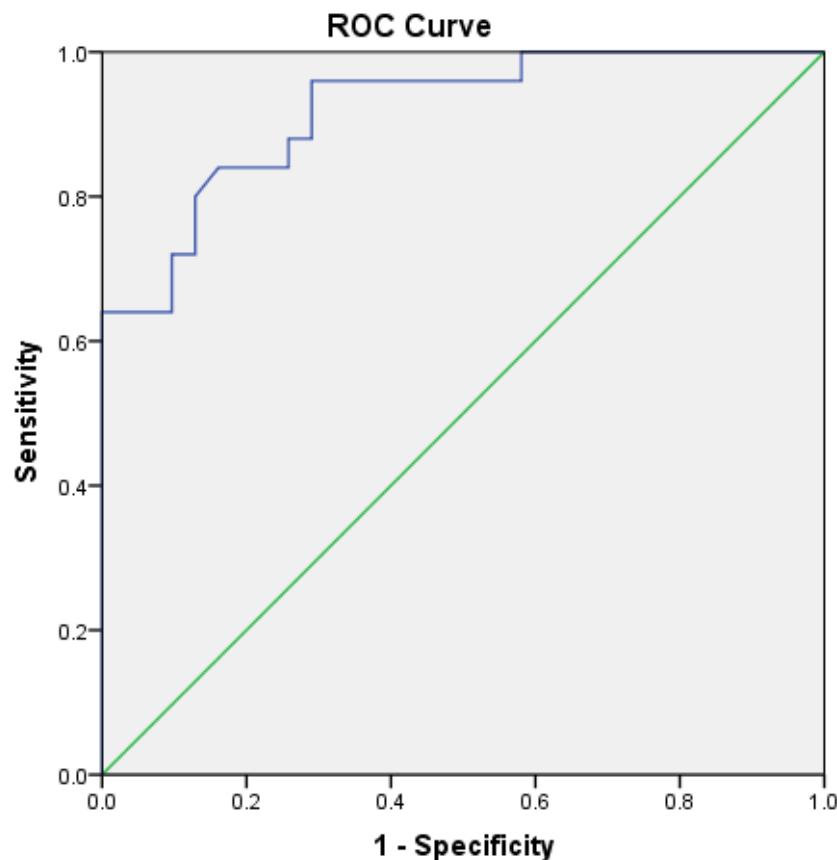
Test Result Variable(s): CTRP3

Area	Std. Error <sup>a</sup>	Asymptotic Sig. <sup>b</sup>	Asymptotic 95% Confidence Interval	
			Lower Bound	Upper Bound
.900	.032	.000	.838	.962

a. Under the nonparametric assumption

b. Null hypothesis: true area = 0.5

Fig A. 2



Diagonal segments are produced by ties.

**Area Under the Curve**

Test Result Variable(s): CTRP3

Area	Std. Error <sup>a</sup>	Asymptotic Sig. <sup>b</sup>	Asymptotic 95% Confidence Interval	
			Lower Bound	Upper Bound
.919	.035	.000	.850	.989

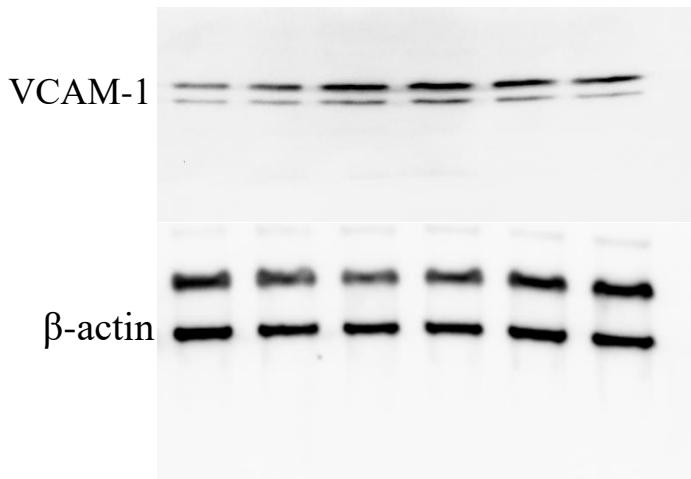
The test result variable(s): CTRP3 has at least one tie between the positive actual state group and the negative actual state group. Statistics may be biased.

a. Under the nonparametric assumption

b. Null hypothesis: true area = 0.5

Fig B. CTRP3 inhibits high glucose/high lipids (HGHL)-induced expression of VCAM-1 in a time- and dose-dependent manner.

1



2

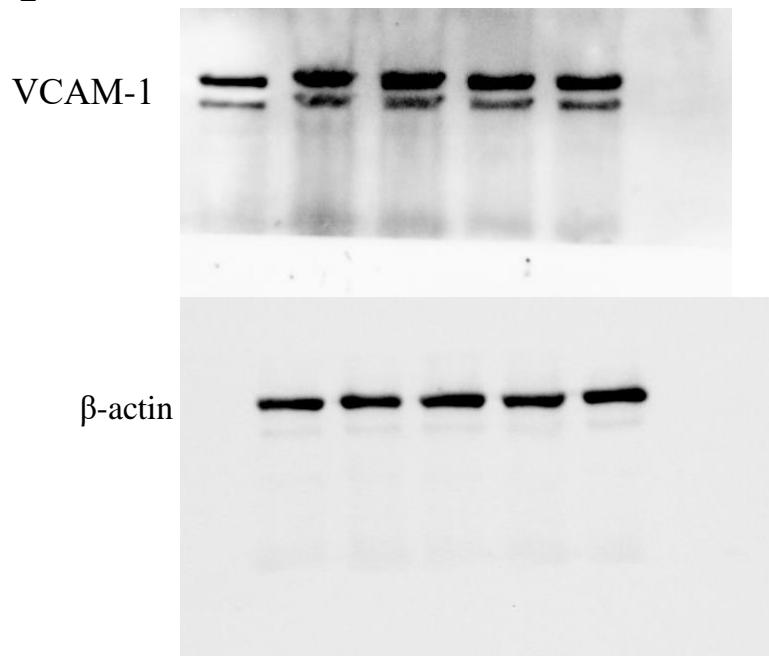
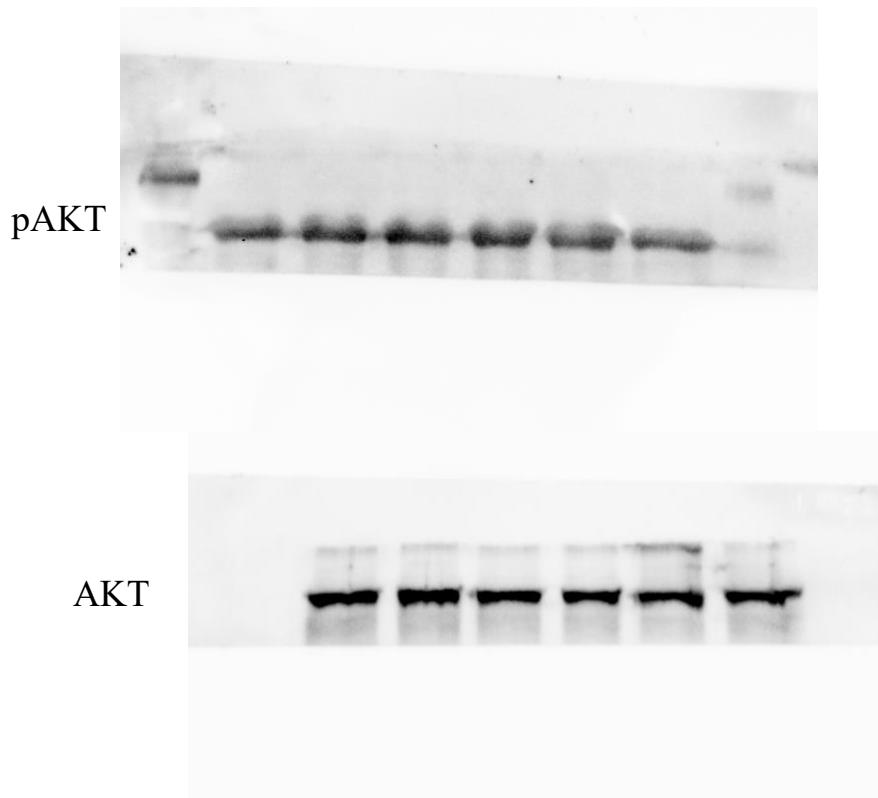


Fig C. CTRP3 inhibited HGHL induced VCAM-1 production in an AMPK dependent manner.

1



2

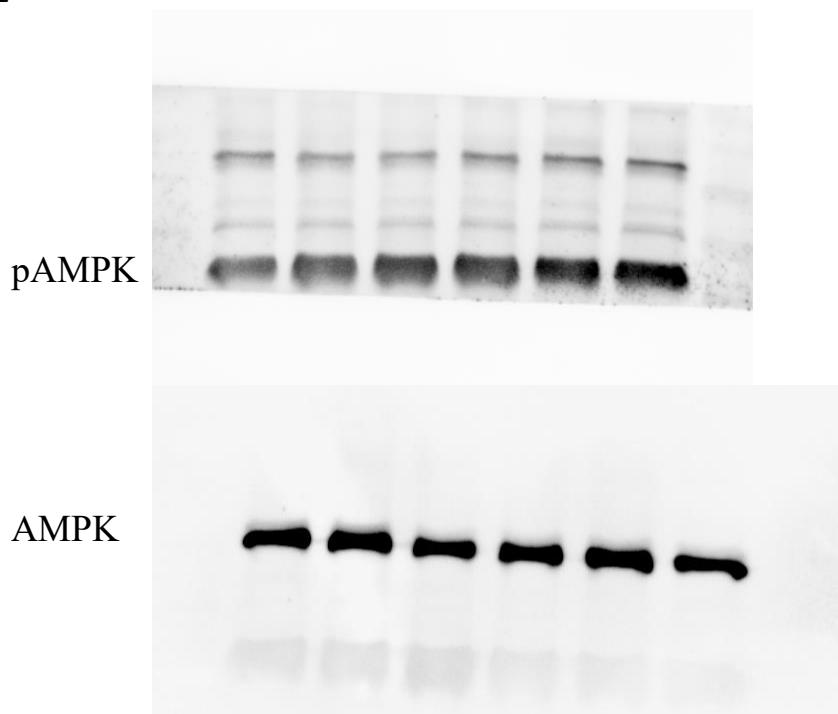


Fig C. 3

