Article

Secukinumab and Black Garlic Downregulate OPG/RANK/RANKL Axis and Devitalize Myocardial Interstitial Fibrosis Induced by Sunitinib in Experimental Rats

Hoda E. Mohamad [1,*], Mervat E. Asker [1], Mohamed A. Shaheen [2], Nourhan M. Baraka [1], Omer I. Fantoukh [3], Abdulaziz Alqahtani [3], Alaa E. Salama [4] and Yasmin K. Mahmoud [1]

[1] Department of Biochemistry, Faculty of Pharmacy, Zagazig University, Zagazig 44519, Egypt
[2] Department of Histology & Cell Biology, Faculty of Medicine, Zagazig University, Zagazig 44519, Egypt
[3] Department of Pharmacognosy, College of Pharmacy, King Saud University, Riyadh 11451, Saudi Arabia
[4] Department of Cardiology, Faculty of Medicine, Zagazig University, Zagazig 44519, Egypt
* Correspondence: hmohammed@zu.edu.eg; Tel.: +20-10-2799-4483

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Table S1. Effect of treatment with sunitinib (25 mg/kg three times a week) orally for 4 weeks on serum CRP and CK-MB levels.

	NC	SUN
CRP (ng/ml)	21.78 ± 6.791	326.4 ± 36.12 [a]
CK-MB (U/L)	457.1 ± 29.09	975.3 ± 21.74 [a]

CRP: C-reactive protein; CK-MB: creatine kinase –MB**;** NC: normal control; SUN: sunitinib; [a]P< 0.001 vs. NC. The data are expressed as mean ± SD, (n =6/group); S.D: Standard deviation; n: Sample size.

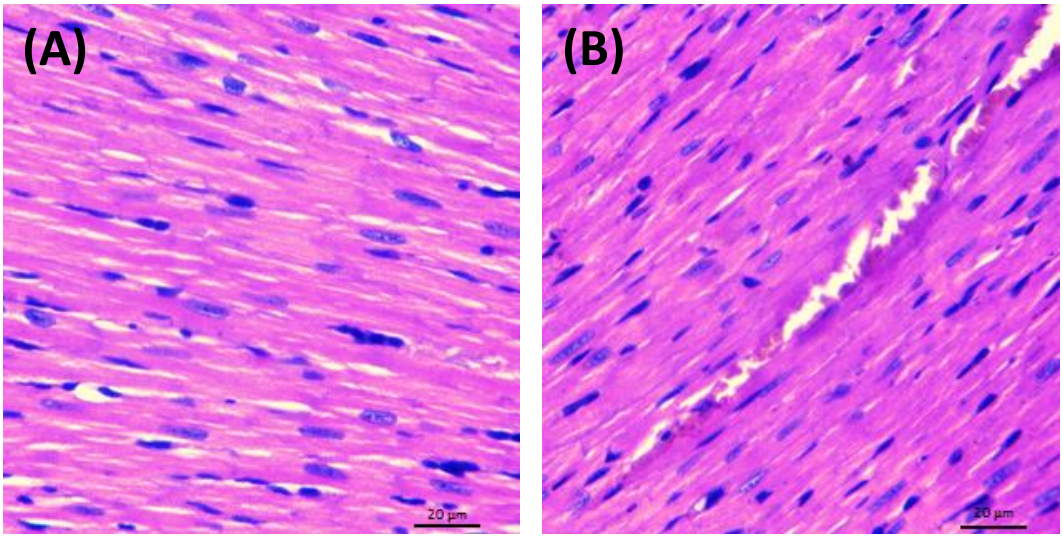

Figure S1. Representative photomicrographs of H&E-stained cardiac sections (H&E staining x400, scale bar= 20µm). (A): Normal Control group showing the normal general architecture of cardiac tissue (B): Sunitinib group revealing disturbed general cardiac tissue architecture with degenerated fibers and congested blood vessels.

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CLUSTAL O(1.2.4) multiple sequence alignment

sp|Q16552|IL17_HUMAN      MTPGKTSLVSL--LLLLSLEAIVKAGITIPRNPGCPNSEDKNFPRTVMVNLNIHNRN-TN  57
sp|Q62386|IL17_MOUSE      MSPGRASSVSLMLLLLLSLAATVKAAAIIPQSSACPNTEAKDFLQNVKVNLKVFNSLGAK  60
sp|Q61453|IL17_RAT        --------MCLMLLLLLNLEATVKAAVLIPQSSVCPNAEANNFLQNVKVNLKVINSLSSK  52
                                 :.*  ****.* * ***.  **:.  ***:* ::* :.* ***:: *   ::

sp|Q16552|IL17_HUMAN      TNPKRSSDYYNRSTSPWNLHRNEDPERYPSVIWEAKCRHLGCINADGNVDYHMNSVPIQQ  117
sp|Q62386|IL17_MOUSE      VSSRRPSDYLNRSTSPWTLHRNEDPDRYPSVIWEAQCRHQRCVNAEGKLDHHMNSVLIQQ  120
sp|Q61453|IL17_RAT        ASSRRPSDYLNRSTSPWTLSRNEDPDRYPSVIWEAQCRHQRCVNAEGKLDHHMNSVLIQQ  112
                          .. :* *** *******.* *****:*********:***  *:**:*::*:***** ***

sp|Q16552|IL17_HUMAN      EILVLRREPPHCPNSFRLEKILVSVGCTCVTPIVHHVA        155
sp|Q62386|IL17_MOUSE      EILVLKREPESCPFTFRVEKMLVGVGCTCVASIVRQAA        158
sp|Q61453|IL17_RAT        EILVLKREPEKCPFTFRVEKMLVGVGCTCVSSIVRHAS        150
                          *****:***  ** :**:**:**.******: **::.:
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Figure S2. Sequence and structural alignments human IL17 A, IL17 A mouse and rat IL17 A. Clustal Omega 1.2.4 was used to align the human amino acid sequences of IL17 A and the sequence of IL17 A of mouse and rat, indicating conservation of the most amino acid residues. Clustal O; which "*" means that the residues are identical, ":" means that conserved substitutions have been observed, "." means that semi-conserved substitutions are observed. The residues are colored according to their chemical properties where red, small hydrophobic (AVFPMILWY); blue, acidic (DE); purple, basic (RHK); green, hydroxyl + amine + basic (STYHCNGQ).

There are 74.7 and78.1 % amino acid similarity between IL17 A human and both IL17A mouse and IL17 A rat, respectively. (Table 1), indicating conservation of most amino residues.

Table S2. BLAST analysis between human IL17 A and both IL17 A mouse and rat.

Organism	Sequence identity%	Positive %	Chain length	E-Value
IL17 mouse	62.0	74.7%	158	$5.8e^{-63}$
IL17 rat	62.3	78.1	150	$1.7e^{-60}$