Gmail **Travis Karschnik <karschnikaop@gmail.com>**

Re: Oxidative stress key events gardening

1 message

Travis Karschnik <karschnikaop@gmail.com> Thu, Jul 4, 2024 at 4:08 PM
To: 韦艳宏 <weiyh9@mail.sysu.edu.cn>
Cc: aopwiki <aopwiki@googlegroups.com>

Hello Yanhong,

I have enacted the changes proposed in my previous email:

AOP507

- Replaced KE1969 with KE1392
  - Recreated KER2979 (1417-> 1969) with a novel KER by linking (1417-> 1392)
  - Recreated KER2980 (1969-> 2009) with a novel KER by linking (1392-> 2009)

Type	Event ID	Title	Short name	
MIE	1417	NFE2/Nrf2 repression	NFE2/Nrf2 repression	Edit
KE	1392	Oxidative Stress	Oxidative Stress	Edit
KE	2009	Activation of inflammation pathway	Activation, inflammation pathway	Edit

Title	Adjacency	Evidence	Quantitative Understanding	
NFE2/Nrf2 repression leads to Oxidative Stress	adjacent	High	High	Edit Remove
Oxidative Stress leads to Activation, inflammation pathway	adjacent	High	High	Edit Remove
Activation, inflammation pathway leads to increased, Vascular endothelial dysfunction	adjacent	High	High	Edit Remove
increased, Vascular endothelial dysfunction leads to Angiogenesis dysfunction	adjacent	High	High	Edit Remove

The Key Event Description and How It Is Measured or Detected fields on KE1969 are populated. KE1392 has all of the information from the How It Is Measured or Detected field and much of the information from the Key Event Description. Beyond that, KE1392 has additional fields populated. It'll be up to you to review the Key Event Description field from KE1969 to determine whether you'd like to transfer anything over to the preferred KE1392.

There wasn't any text on KER2979 or KER2980, so I didn't transfer anything from those pages to their replacements KER3276 and KER3277, respectively.

AOP509

- Replaced KE1969 with KE1392
  - Recreated KER2979 (1417-> 1969) with a novel KER3276 by linking (1417-> 1392)
  - Recreated KER3033 (1969-> 1365) with a novel KER3270 by linking (1392-> 1365)
  - Recreated KER3130 (1969-> 177) with a novel KER3129 by linking (1392-> 177)

Type	Event ID	Title	Short name	
MIE	1417	NFE2/Nrf2 repression	NFE2/Nrf2 repression	Edit
KE	1392	Oxidative Stress	Oxidative Stress	Edit
KE	1365	Increase, Apoptosis	Increase, Apoptosis	Edit

Title	Adjacency	Evidence	Quantitative Understanding	
NFE2/Nrf2 repression leads to Oxidative Stress	adjacent	High	High	Edit Remove
Oxidative Stress leads to Increase, Apoptosis	adjacent	High	High	Edit Remove
Oxidative Stress leads to Mitochondrial dysfunction	adjacent	High	High	Edit Remove
Mitochondrial dysfunction leads to Increase, Apoptosis	adjacent	High	High	Edit Remove

A summary of the relationship between KE1969 and KE1392 has been provided above.

There wasn't any text on KER2979 or KER3033, so I didn't transfer anything from those pages to their replacements KER3276 and KER3270, respectively. There was content on KER3130, all of which was transferred to the new KER3129.

AOP510

- Replaced KE1969 with KE1392
    - Recreated KER2907 (850-> 1969) with a novel KER by linking (850-> 1392)
    - Recreated KER2897 (1969-> 277) with a novel KER by linking (1392-> 277)

Type	Event ID	Title	Short name	
MIE	228	peroxisome proliferator activated receptor promoter demethylation	demethylation, PPARg promoter	Edit
KE	2165	Activation of PPAR	Activation of PPAR	Edit
KE	1392	Oxidative Stress	Oxidative Stress	Edit
KE	2166	Abnormal expression of NO	Abnormal expression of NO	Edit

Title		Adjacency	Evidence	Quantitative Understanding	
demethylation, PPARg promoter leads to Activation of PPAR	adjacent	High	High	Edit	Remove
Activation of PPAR leads to Oxidative Stress	adjacent	High	High	Edit	Remove
Activation of PPAR leads to Activation of MMP-2 MMP-9	adjacent	High	High	Edit	Remove
Activation of PPAR leads to Activation of angiopoietin like protein 4	adjacent	High	High	Edit	Remove
Activation of PPAR leads to Activation of Angiogenic cytokines	adjacent	High	High	Edit	Remove
Oxidative Stress leads to Abnormal expression of NO	adjacent	High	High	Edit	Remove
Activation of MMP-2 MMP-9 leads to increased, Vascular endothelial dysfunction	adjacent	Moderate	Moderate	Edit	Remove

A summary of the relationship between KE1969 and KE1392 has been provided above.

There wasn't any content on KER2989 or KER2993, so I didn't transfer anything from those pages to their replacements KER3278 and KER3279, respectively.

AOP511

- Replaced KE1969 with KE1392
    1. Recreated KER2998 (257-> 1969) with a novel KER3238 by linking (257-> 1392)
    2. Recreated KER2980 (1969-> 2009) with a novel KER3277 by linking (1392-> 2009)
    3. Recreated KER2999 (1969-> 2170) with a novel KER3280 by linking (1392-> 2170)
    4. Recreated KER3000 (1969-> 2164) with a novel KER3281 by linking (1392-> 2164)
    5. Recreated KER3001 (1969-> 2171) with a novel KER3282 by linking (1392-> 2171)
    6. Recreated KER3002 (1969-> 2172) with a novel KER3283 by linking (1392-> 2172)
    7. Recreated KER3003 (1969-> 932) with a novel KER3284 by linking (1392-> 932)
    8. Recreated KER3004 (1969-> 2173) with a novel KER3285 by linking (1392-> 2173)
    9. Recreated KER3005 (1969-> 2174) with a novel KER3286 by linking (1392-> 2174)
    10. Recreated KER3130 (1969-> 177) with a novel KER3129 by linking (1392-> 177)

Type	Event ID	Title	Short name	
MIE	257	Increase, Reactive Oxygen Species production	Increase, ROS production	Edit
KE	1392	Oxidative Stress	Oxidative Stress	Edit
KE	2009	Activation of inflammation pathway	Activation, inflammation pathway	Edit

Increase, ROS production leads to Oxidative Stress	adjacent	High	High	Edit Remove
Oxidative Stress leads to Activation, inflammation pathway	adjacent	High	High	Edit Remove
Oxidative Stress leads to Activated ANG/Tie2 pathway	adjacent	Moderate	Moderate	Edit Remove
Oxidative Stress leads to Activation, Dll4-Notch pathway	adjacent	High	High	Edit Remove
Oxidative Stress leads to Activated BMP/TGF-beta pathway	adjacent	Low	Low	Edit Remove
Oxidative Stress leads to Activated Wnt/Frizzled pathway	adjacent	Low	Low	Edit Remove
Oxidative Stress leads to Uncoupling, eNOS	adjacent	High	High	Edit Remove
Oxidative Stress leads to Activated AKT/ERK/PI3K pathway	adjacent	Moderate	Moderate	Edit Remove
Oxidative Stress leads to Inhibition VEGF/VEGFR pathway	adjacent	High	High	Edit Remove
Oxidative Stress leads to Mitochondrial dysfunction	adjacent	High	High	Edit Remove
Activation, inflammation pathway leads to	adjacent	High	High	Edit Remove

A summary of the relationship between KE1969 and KE1392 has been provided above.

There wasn't any text on any of the KERs which were replaced, excluding KER3130 so I didn't transfer anything from those pages to their replacements. There was content on KER3130, all of which was transferred to the new KER3129.

In all of the AOPs above there are no specific references to KE1969 in the text fields. There are many references to 'oxidative stress' generally however, the change from KE1969 to KE1392 does not merit a change in that language. It's still applicable.

If you have any questions, please let me know. Thank you!

On Fri, May 24, 2024 at 2:09 PM Travis Karschnik <karschnikaop@gmail.com> wrote:

Hello Yanhong,

A set of apparently overlapping key events has been identified and a proposal to reduce them has been made. The set of Key Events, with yours highlighted, follows:

Event ID & Title	Short Name	Associated AOP Counts	Biological Context	%Fields Populated	Action
Event 1392: Oxidative Stress	Oxidative Stress	18 (2)	Molecular	44	Retain
Event 1088: Increased, Oxidative Stress	Increased, Oxidative Stress	12	Molecular	11	Replace w/1392

Event 1969: Increase, Oxidative Stress	Increase, Oxidative Stress	7	Molecular	44	Replace w/1392
Event 1510: Oxidative Stress in Brain	Oxidative Stress in Brain	4	Molecular	33	Replace w/1392
Event 211: Propagation, Oxidative stress	Propagation, Oxidative stress	2	Molecular	11	Replace w/1392
Event 356: Increased, Oxidative damage	Increased, Oxidative damage	1	Individual	0	Replace w/1392

KE1392 has been identified as the candidate to be retained. Since KE1969 is included in several AOPs you've developed, AOP507, AOP509, AOP510, and AOP511, I wanted to give you a chance to review this proposal before actions are taken. Here is a summary of what I will be enacting:

AOP507

- Replace KE1969 with KE1392
    - Recreate KER2979 (1417-> 1969) with a novel KER by linking (1417-> 1392)
    - Recreate KER2980 (1969-> 2009) with a novel KER by linking (1392-> 2009)

Type	Event ID	Title	Short name	
MIE	1417	NFE2/Nrf2 repression	NFE2/Nrf2 repression	Edit
KE	1969	Increase, Oxidative Stress	Increase, Oxidative Stress	Edit
KE	2009	Activation of inflammation pathway	Activation, inflammation pathway	Edit

Title	Adjacency	Evidence	Quantitative Understanding	
NFE2/Nrf2 repression leads to Increase, Oxidative Stress	adjacent	High	High	Edit Remove
Increase, Oxidative Stress leads to Activation, inflammation pathway	adjacent	High	High	Edit Remove
Activation, inflammation pathway leads to increased, Vascular endothelial dysfunction	adjacent	High	High	Edit Remove

AOP509

- Replace KE1969 with KE1392
    - Recreate KER2979 (1417 -> 1969) with a novel KER by linking (1417 -> 1392)
    - Recreate KER3033 (1969 -> 1365) with a novel KER by linking (1392 -> 1365)
    - Recreate KER3130 (1969 -> 177) with a novel KER by linking (1392 -> 177)

Type	Event ID	Title	Short name	
MIE	1417	NFE2/Nrf2 repression	NFE2/Nrf2 repression	Edit
KE	1969	Increase, Oxidative Stress	Increase, Oxidative Stress	Edit
KE	1365	Increase, Apoptosis	Increase, Apoptosis	Edit

Title	Adjacency	Evidence	Quantitative Understanding	
NFE2/Nrf2 repression leads to Increase, Oxidative Stress	adjacent	High	High	Edit Remove
Increase, Oxidative Stress leads to Increase, Apoptosis	adjacent	High	High	Edit Remove
Increase, Oxidative Stress leads to Mitochondrial dysfunction	adjacent	High	High	Edit Remove
Mitochondrial dysfunction leads to Increase, Apoptosis	adjacent	High	High	Edit Remove

AOP510

- Replace KE1969 with KE1392
  - Recreate KER2907 (850-> 1969) with a novel KER by linking (850-> 1392)
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Type	Event ID	Title	Short name	
MIE	228	peroxisome proliferator activated receptor promoter demethylation	demethylation, PPARg promoter	Edit
KE	2165	Activation of PPAR	Activation of PPAR	Edit
KE	1969	Increase, Oxidative Stress	Increase, Oxidative Stress	Edit
KE	2166	Abnormal expression of NO	Abnormal expression of NO	Edit

Title	Adjacency	Evidence	Quantitative Understanding	
demethylation, PPARg promoter leads to Activation of PPAR	adjacent	High	High	Edit Remove
Activation of PPAR leads to Increase, Oxidative Stress	adjacent	High	High	Edit Remove
Activation of PPAR leads to Activation of MMP-2 MMP-9	adjacent	High	High	Edit Remove
Activation of PPAR leads to Activation of angiopoietin like protein 4	adjacent	High	High	Edit Remove
Activation of PPAR leads to Activation of Angiogenic cytokines	adjacent	High	High	Edit Remove
Increase, Oxidative Stress leads to Abnormal expression of NO	adjacent	High	High	Edit Remove

AOP511

- Replace KE1969 with KE1392
    1. Recreate KER2998 (257-> 1969) with a novel KER by linking (257-> 1392)
    2. Recreate KER2980 (1969-> 2009) with a novel KER by linking (1392-> 2009)
    3. Recreate KER2999 (1969-> 2170) with a novel KER by linking (1392-> 2170)
    4. Recreate KER3000 (1969-> 2164) with a novel KER by linking (1392-> 2164)
    5. Recreate KER3001 (1969-> 2171) with a novel KER by linking (1392-> 2171)
    6. Recreate KER3002 (1969-> 2172) with a novel KER by linking (1392-> 2172)
    7. Recreate KER3003 (1969-> 932) with a novel KER by linking (1392-> 932)
    8. Recreate KER3004 (1969-> 2173) with a novel KER by linking (1392-> 2173)
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Type	Event ID	Title	Short name	
MIE	257	Increase, Reactive Oxygen Species production	Increase, ROS production	Edit
KE	1969	Increase, Oxidative Stress	Increase, Oxidative Stress	Edit
KE	2009	Activation of inflammation pathway	Activation, inflammation pathway	Edit

Title	Adjacency	Evidence	Understanding	
Increase, ROS production leads to Increase, Oxidative Stress	adjacent	High	High	Edit Remove
Increase, Oxidative Stress leads to Activation, inflammation pathway	adjacent	High	High	Edit Remove
Increase, Oxidative Stress leads to Activated ANG/Tie2 pathway	adjacent	Moderate	Moderate	Edit Remove
Increase, Oxidative Stress leads to Activation, Dll4-Notch pathway	adjacent	High	High	Edit Remove
Increase, Oxidative Stress leads to Activated BMP/TGF-beta pathway	adjacent	Low	Low	Edit Remove
Increase, Oxidative Stress leads to Activated Wnt/ Frizzled pathway	adjacent	Low	Low	Edit Remove
Increase, Oxidative Stress leads to Uncoupling, eNOS	adjacent	High	High	Edit Remove
Increase, Oxidative Stress leads to Activated AKT/ ERK/PI3K pathway	adjacent	Moderate	Moderate	Edit Remove
Increase, Oxidative Stress leads to Inhibition VEGF/VEGFR pathway	adjacent	High	High	Edit Remove
Increase, Oxidative Stress leads to Mitochondrial dysfunction	adjacent	High	High	Edit Remove
Activation, inflammation pathway leads to increased， Vascular endothelial dysfunction	adjacent	High	High	Edit Remove

I'm looking forward to hearing back from you. If no response is received by 06/21/2024 I'll move ahead with the gardening actions described above.

Thanks!

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Travis Karschnik

On behalf of the AOPWiki Administrator group.

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Travis Karschnik

On behalf of the AOPWiki Administrator group.