

- 1 Supplementary Table 1. HPLC/DAD conditions of determination of representative standard
- 2 compounds in Oyaksungisan (OY) and *Achyranthes bidentata* radix (AB) extract.

Conditions	OY	AB
HPLC	Waters 2690 Separation module	
Detector	Waters 2996 Photodiode Array Detector (PDA)	
Column	Luna C ₁₈ column (5 μm, 4.6 mm x 250 mm)	
Mobile phase	0 min, A ^a :B ^b = 80:20	0 - 40 min, C ^c :D ^d = 85:15
	10 min, A ^a :B ^b = 80:20	
	15 min, A ^a :B ^b = 65:35	
	30 min, A ^a :B ^b = 50:50	
	40 min, A ^a :B ^b = 35:65	
	60 min, A ^a :B ^b = 30:70	
Flow rate	1 ml/min	1 ml/min
Column temperature	35° C	40° C
Injection volume	10 μl	20 μl
UV detection wave length	250, 280, 360 nm	245 nm

3 ^a 0.1% trifluoroacetic acid in water

4 ^b Methanol

5 ^c 0.1% formic acid in water

6 ^d Acetonitrile

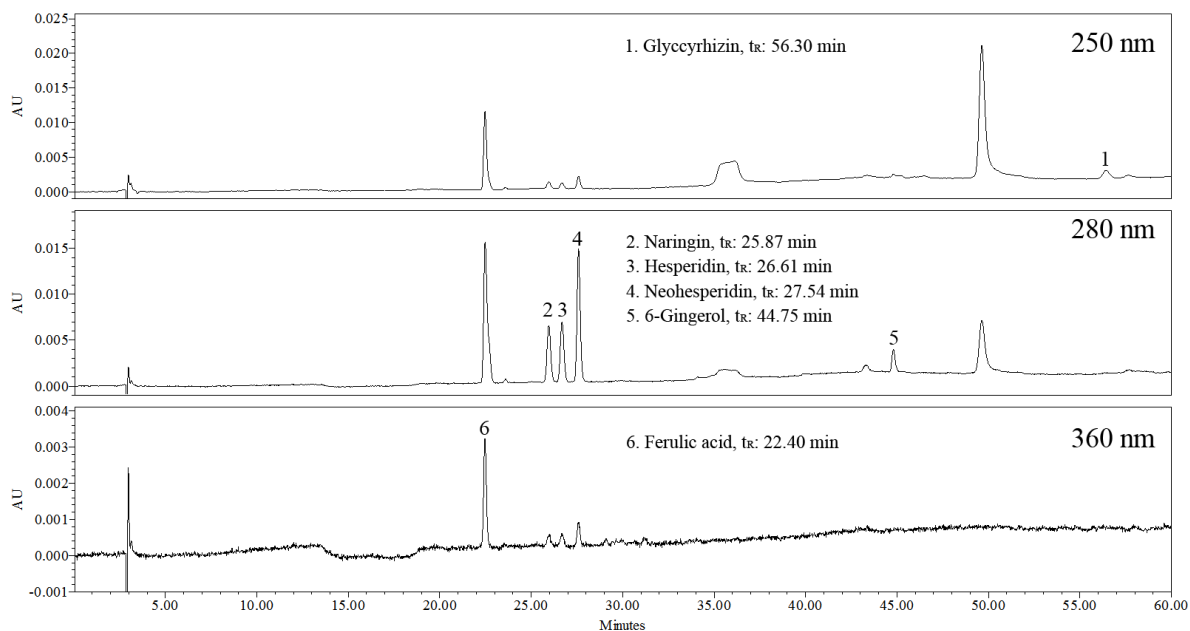
7 Supplementary Table 2. The contents of representative standard compounds in Oyaksungisan
 8 (OY) or *Achyranthes bidentata* radix (AB) extract.

Herbal medicine	Compound	Concentration (mg/g)* (n=3)
Oyaksungisan granule	Glycyrrhizin	1.075 ± 0.008
	Naringin	0.226 ± 0.002
	Hesperidin	1.112 ± 0.007
	Neohesperidin	0.006 ± 0.000
	6-Gingerol	Below the limit of detection
	Ferulic acid	0.043 ± 0.002
<i>Achyranthes bidentata</i> radix extract	Ecdysterone	0.691 ± 0.023
	R-Inokosterone	0.503 ± 0.052
	S-Inokosterone	0.457 ± 0.009

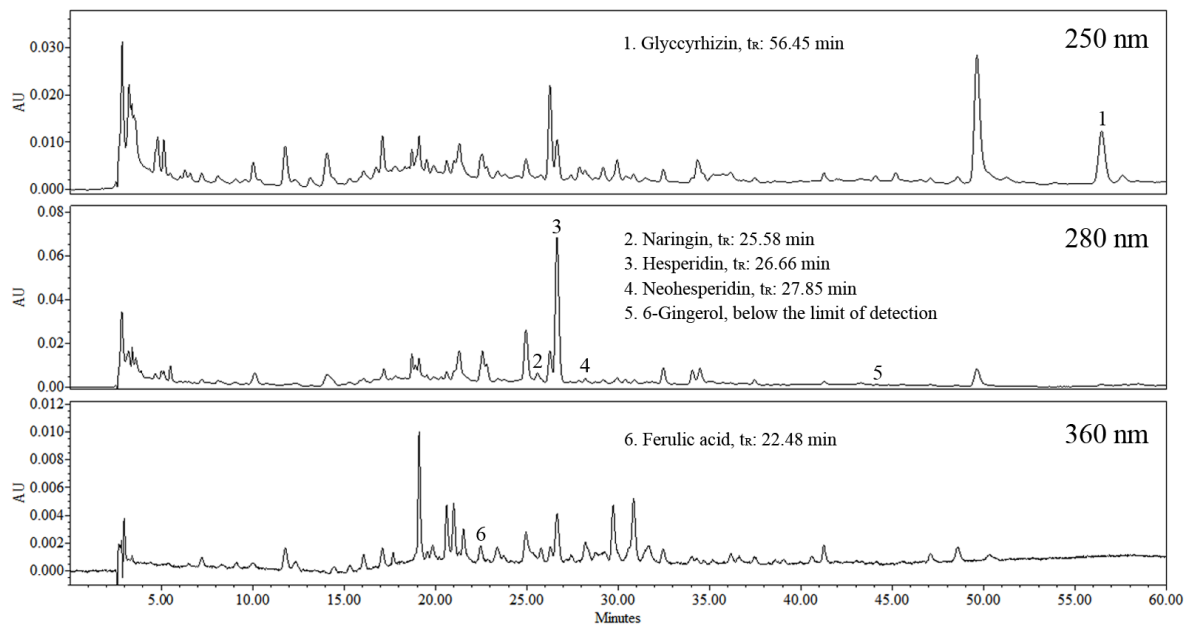
9 *The concentration of each component is represented as milligram (mg) of each component
 10 in gram (g) of Oyaksungisan (OY) granule or extracted *Achyranthes bidentata* Radix (AB)
 11 powder.

12 Supplementary Figure 1. (A) Representative standard compounds and (B) HPLC fingerprint
13 chromatograms of Oyaksungisan (OY) granule.
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(A) Reference standards



(B) Oyaksungisan

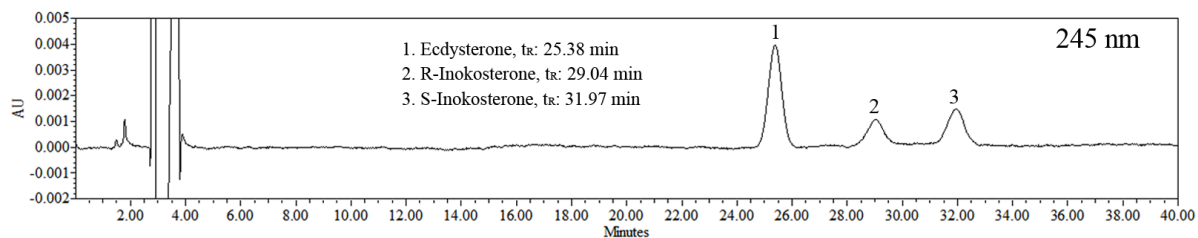


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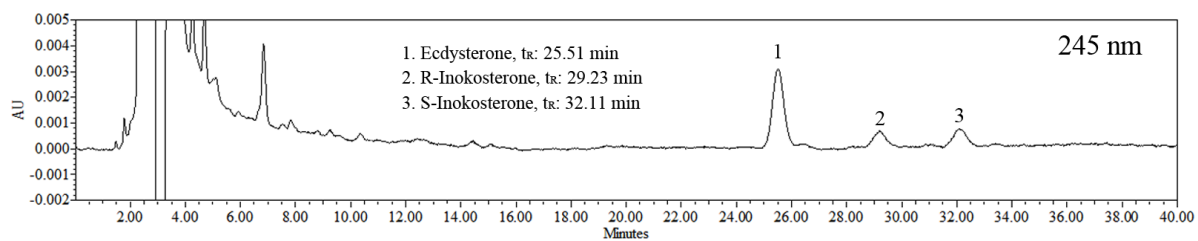
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17 Supplementary Figure 2. (A) Representative standard compounds and (B) HPLC fingerprint
18 chromatograms of *Achyranthes bidentata* radix (AB) extract.

(A) Reference standards



(B) *Achyranthis radix* extract



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