**Supplementary Material**

Table S1. Information about the compounds of HXMM Intestinal Absorption Solution

| Name                  | Formula     | Annot. DeltaMass [ppm] | Calc. MW | RT [min] | Group Area: HE-Y-NEG | Group Area: HE-Y-POS |
|-----------------------|-------------|------------------------|----------|----------|----------------------|----------------------|
| Baicalein             | C15 H10 O5  | -1.17                  | 270.052 5 | 28.62    | 312923670 60         | 352232719 80         |
| Baicalin              | C21 H18 O11 | -0.9                   | 446.084 5 | 24.09    | 253962002 60         | 350426958 87         |
| Wogonin               | C16 H12 O5  | -0.71                  | 284.068 3 | 32.15    | 164884754 52         | 326559559 16         |
| Gentiopicrin          | C16 H20 O9  | -1.12                  | 356.110 3 | 20.04    | 149757739 83         | 982674741.5          |
| Wogonoside            | C22 H20 O11 | -0.77                  | 460.100 2 | 26.01    | 143459879 49         | 170332899 56         |
| Citric acid           | C6 H8 O7    | -0.42                  | 192.026 9 | 3.524    | 124156224 58         | 897955873.3          |
| 3,5-Dicaffeoylquinic acid | C25 H24 O12 | -500001                | 258.063 6 | 22.72    | 758048581 0          | 0                    |
| Paeoniflorin          | C23 H28 O11 | -0.96                  | 480.162 7 | 20.90    | 650346292 4          | 194991591 9          |
| Specnuezhenide        | C31 H42 O17 | -0.69                  | 686.241 7 | 22.16    | 584167026 2          | 194991591 9          |
| Oroxylin A-7-O-β-D-    | C22 H20 O11 | -0.81                  | 460.100 2 | 25.42    | 571808373 7          | 765278052            |
| Glucuronide                     | C9 H10 O5   | -0.96 | 198.052 | 17.25 | 538491775 |
|--------------------------------|-------------|-------|---------|-------|-----------|
| Danshensu                      | C16 H12 O5  | -0.85 | 284.068 | 32.63 | 507988854 |
| Acacetin                       | C19 H18 O8  | -0.57 | 374.1   | 32.56 | 478773718 |
| Chrysosplenetin B              | C16 H12 O5  | -0.63 | 284.068 | 32.95 | 473755005 |
| Oroyxlin A                     | C15 H10 O5  | -1.19 | 270.052 | 27.66 | 462763587 |
| Apigenin                       | C29 H36 O15 | -0.84 | 624.204 | 21.75 | 411080717 |
| Isoacteoside                   | C26 H22 O10 | -0.7  | 494.121 | 24.86 | 406378942 |
| Salvanolic acid A              | C24 H42 O21 | 0.64  | 666.221 | 2.437 | 356104239 |
| Stachyose                      | C16 H18 O9  | -0.64 | 354.094 | 19.36 | 339678740 |

Supplementary Material: |
| Chemical       | Molecular Formula | LogP | MW | Octanol/water | LogD | Octanol/Poly(2-vinylpyridine) | LogD | Octanol/Butyl acetate | LogD |
|----------------|-------------------|------|----|---------------|------|-----------------------------|------|------------------------|------|
| Sucrose        | C12 H22 O11       | -0.87| 342.115 | 2.089        |      | 321042755                  |      |                        |      |
| Geniposidic acid| C16 H22 O10      | -0.78| 374.121 | 17.76        |      | 320034164                  |      | 121594143              |      |
| Manninotriose  | C18 H32 O16       | -0.31| 504.168 | 2.688        |      | 312191250                  |      |                        |      |
| Diosmetin      | C16 H12 O6        | -1.03| 300.063 | 28.37        |      | 296392092                  |      |                        |      |
| Isochlorogenic acid | C25 H24 O12 | -1.27| 516.126 | 23.12        |      | 282574166                  |      | 403226922              |      |
| Loganic acid   | C16 H24 O10       | -0.71| 376.136 | 18.47        |      | 272219155                  |      | 113216973              |      |
| Chrysin        | C15 H10 O4        | -0.93| 254.057 | 32.34        |      | 259163577                  |      | 183824981              |      |
| Lithospermic acid | C27 H22 O12   | -0.96| 538.110 | 21.75        |      | 238119535                  |      |                        |      |
| Albiflorin     | C23 H28 O11       | -0.63| 480.162 | 23.25        |      | 230296472                  |      | 139450356              |      |
| Scutellarein   | C15 H10 O6        | -0.98| 286.047 | 24.49        |      | 217464592                  |      | 277676044              |      |
| Quercitrin     | C21 H20 O11       | -0.49| 448.100 | 24.68        |      | 203136867                  |      | 748804100              |      |
| Apigenin-7-O-β-D-glucoside | C21 H20 O10 | -0.61| 432.105 | 23.01        |      | 186205269                  |      | 197982720              |      |
| Narcissoside   | C28 H32 O16       | -0.48| 624.168 | 21.88        |      | 176606296                  |      | 675784192              |      |
| Compound                  | Molecular Formula | Retention Time | Rf Value | Mass | Molar Concentration |
|---------------------------|-------------------|----------------|----------|------|---------------------|
| Typhaneoside              | C34 H42 O20       | 710.226        | 0.67     | 743920024.05 |
| Ecliptasaponin A          | C36 H58 O9        | 634.407        | 0.57     | 158776856.05 |
| Verbascoside              | C29 H36 O15       | 624.205        | 0.76     | 106434211.09 |
| Benzoypaeoniflorin        | C30 H32 O12       | 584.189        | -0.11    | 572987181.05 |
| Pyrogallol                | C6 H6 O3          | 126.031        | -1.42    | 129389780.07 |
| Jaceosidin                | C17 H14 O7        | 330.073        | -0.65    | 846666017.09 |
| Raffinose                 | C18 H32 O16       | 91249.8        | 91249.8  | 995473376.04 |
| Eriodictyol               | C15 H12 O6        | 288.063        | -1.02    | 396065762.07 |
| Quinic acid               | C7 H12 O6         | 192.063        | -0.74    | 952329819.04 |
| Baicalin methyl ester     | C22 H20 O11       | 460.100        | -0.81    | 144199425.05 |
| Caffeic acid              | C9 H8 O4          | 180.042        | -0.9     | 848704789.05 |
| Naringenin chalcone       | C15 H12 O5        | 272.068        | -0.64    | 330352132.02 |
| Name                          | Molecular Formula | R  | m/z  | pIC  | molar mass | Reference Number |
|-------------------------------|-------------------|----|------|------|-----------|------------------|
| Astilbin                      | C21 H22 O11       | -0.8 | 450.115 | 21.84 | 775195351 | 146663556         |
| Paeonolide                    | C20 H28 O12       | -0.29 | 460.157 | 20.21 | 775129034. |                  |
| Linarin                       | C28 H32 O14       | -0.35 | 592.179 | 24.85 | 772122065. | 219822004         |
| Oxypaeoniflorin               | C23 H28 O12       | -0.06 | 496.158 | 19.16 | 653600357. |                  |
| Diosmetin-7-O-β-D-glucopyranoside | C22 H22 O11     | -0.85 | 462.115 | 23.41 | 645999081. | 155229053         |
| Pectolinarigenin              | C17 H14 O6        | -1.11 | 314.078 | 32.51 | 634898481. | 277899060         |
| Salidroside                   | C14 H20 O7        | -0.97 | 300.120 | 18.50 | 595860396 | 187714910.       |
| Hesperetin                    | C16 H14 O6        | -1.46 | 302.078 | 28.17 | 591997639. | 288385455.       |
| Cryptochlorogenic acid        | C16 H18 O9        | -0.69 | 354.094 | 18.26 | 590462411. |                  |
| Aurantio-obtusin β-D-glucoside | C23 H24 O12      | -0.3 | 492.126 | 23.82 | 576113646. | 244218027.       |
| Apigenin 7-O-glucuronide      | C21 H18 O11       | -1.43 | 446.084 | 21.46 | 545649411. |                  |
| Iristectorigenin B            | C17 H14 O7        | -0.59 | 330.073 | 28.92 | 510373624 | 749596486         |
| Protocatechuic acid           | C7 H6 O4          | -1.28 | 154.026 | 19.96 | 486629844. |                  |
| Compound                         | Formula   | pK<sub>a</sub> | M(<sub>W</sub>) | M(<sub>r</sub>) | M(<sub>r' r</sub>) |
|---------------------------------|-----------|----------------|----------------|----------------|-----------------|
| Azelaic acid                   | C<sub>9</sub> H<sub>16</sub> O<sub>4</sub> | -0.97          | 188.104        | 485938433.     | 13794187.7      |
| Luteolin 7-glucuronide         | C<sub>21</sub> H<sub>18</sub> O<sub>12</sub> | -0.73          | 462.079        | 475154723.     | 666665203.      |
| Taxifolin                      | C<sub>15</sub> H<sub>12</sub> O<sub>7</sub> | -0.9           | 304.058        | 466950076.     | 86134416.0      |
| Methyl hexadecanoate           | C<sub>17</sub> H<sub>34</sub> O<sub>2</sub> | 170227.        | 316.260        | 448742937.     |                 |
| Rutin                          | C<sub>27</sub> H<sub>30</sub> O<sub>16</sub> | -0.7           | 610.153        | 433497139.     | 185781634.      |
| Orsellinic acid                | C<sub>8</sub> H<sub>8</sub> O<sub>4</sub> | -0.78          | 168.042        | 417616472.     |                 |
| Kaempferol 3-glucorhamnoside   | C<sub>27</sub> H<sub>30</sub> O<sub>15</sub> | -0.41          | 594.158        | 416705474.     | 155405897.      |
| Diosmin                        | C<sub>28</sub> H<sub>32</sub> O<sub>15</sub> | -0.08          | 608.174        | 411525228.     | 853677695.      |
| Lysionotin                     | C<sub>18</sub> H<sub>16</sub> O<sub>7</sub> | -0.57          | 344.089        | 393918633.     | 908592922.      |
| Wedelolactone                  | C<sub>16</sub> H<sub>10</sub> O<sub>7</sub> | -0.79          | 314.042        | 392995537.     | 146004950.      |
| Hastatoside 5-                 | C<sub>17</sub> H<sub>24</sub> O<sub>11</sub> | 113837.        | 450.137        | 383234859.     |                 |
| Nystose                        | C<sub>24</sub> H<sub>42</sub> O<sub>21</sub> | 69054.3        | 712.227        | 378074167.     |                 |
| Compound                        | Formula       | Log P   | MW/RT  | Log S   | MW       | RT       |
|--------------------------------|---------------|---------|--------|---------|----------|----------|
| Scutellarin methyl ester       | C22 H20 O12   | -9663.6 | 430.089| 23.46   | 31746.5015|
| Quercetin-3-O-β-D-glucose-7-O-β-D-gentiobioside | C33 H40 O22   | -0.73   | 788.200| 19.07   | 30479.3128 |
| p-Hydroxybenzaldehyde         | C7 H6 O2      | -0.91   | 122.036| 20.40   | 29027.2233 |
|                                                                 |              |         | 45099.4331 |
| Mannitol                      | C6 H14 O6     | -0.43   | 182.079| 2.32    | 23925.2170 |
| Forsythoside E                | C20 H30 O12   | -0.29   | 462.173| 18.17   | 23243.7933 |
| 7-Hydroxycoumarin             | C9 H6 O3      | -1.9    | 162.031| 23.38   | 23143.7068 |
| 3,4-Dihydroxyphenylethanol    | C8 H10 O3     | -1.02   | 154.062| 17.52   | 17456.6164 |
| Puerarin                      | C21 H20 O9    | -0.39   | 416.110| 22.91   | 14768.1338 |
| Purpureaside C                | C35 H46 O20   | -0.53   | 786.257| 20.07   | 14687.8802 |
| Ellagic acid                  | C14 H6 O8     | -1.2    | 302.005| 21.91   | 12325.4011 |
| Salvianolic acid C            | C26 H20 O10   | 2.52    | 492.106| 25.80   | 11224.1425 |
| Rhoifolin                     | C27 H30 O14   | 0.06    | 578.163| 23.60   | 11149.2290 |
|                                                                 |              |         | 81598.9893 |
| Compound                          | Molecular Formula | Retention Time | Rf Value | M/z Value 1 | M/z Value 2 |
|----------------------------------|-------------------|----------------|----------|-------------|-------------|
| Maltopentaose                    | C30 H52 O26       | 2.609          | -0.31    | 108094897.  | 2           |
| 1,3-Dicaffeoylquinic acid        | C25 H24 O12       | 20.44          | -0.67    | 94700595.5  | 9           |
| 6"-O-Acetylglycitin              | C24 H24 O11       | 29.03          | -0.05    | 83477507.2  | 6           |
| Vanillin                         | C8 H8 O3          | 19.78          | -0.77    | 75635165.4  | 7           |
| Hyperoside                       | C21 H20 O12       | 21.10          | -0.53    | 69324128.0  | 7           |
| Plantamajoside                   | C29 H36 O16       | 21.22          | -0.58    | 67777600.2  | 8           |
| Pinocembrin                      | C15 H12 O4        | 32.73          | -0.67    | 60299337.7  | 2           |
| Sibiricose A5                    | C22 H30 O14       | 20.11          | -0.9     | 57945971.1  | 8           |
| 4-Methoxysalicylic acid          | C8 H8 O4          | 17.62          | -0.78    | 56812471.5  | 1           |
| Tectorigenin                     | C16 H12 O6        | 25.10          | -0.93    | 48725181.4  | 8           |
| Demethylwedelolactone            | C15 H8 O7         | 22.22          | -1.36    | 43719005.3  | 7           |
| Irigenin                         | C18 H16 O8        | 28.56          | -0.83    | 43549941.5  | 4           |
| Compound                         | Molecular Formula | Log P  | MW   | ΔH   | ΔC   | ΔS   |
|---------------------------------|-------------------|--------|------|------|------|------|
| 7,8-Dihydroxycoumarin           | C9 H6 O4          | -1.37  | 178.026 | 21.74 | 42604229.3 |
| Casticin                        | C19 H18 O8        | -0.8   | 374.099 | 31.03 | 41333243.3 |
| Aucubin                         | C15 H22 O9        | 0.31   | 346.126 | 17.14 | 40185718.4 |
| Kaempferol                      | C15 H10 O6        | -1.17  | 286.047 | 22.05 | 38734659.5 | 206636648.3 |
| Spiculisporic acid              | C17 H28 O6        | -0.58  | 328.188 | 36.23 | 37474022.4 |
| Cichoric acid                   | C22 H18 O12       | -1.11  | 474.079 | 21.86 | 34010897.8 |
| Shanzhiside                     | C16 H24 O11       | -0.37  | 392.131 | 17.38 | 31405592.2 |
| Glomeratose A                   | C24 H34 O15       | -1.52  | 562.188 | 19.11 | 28824966.2 |
| 2''-O-β-L-Galactopyranosylorietin | C27 H30 O16     | -0.8   | 610.152 | 18.60 | 27062294.7 | 141118913.5 |
| Calceolarioside B               | C23 H26 O11       | -1.18  | 478.147 | 21.76 | 24866302.4 | 69518037.4 |
| p-Coumaric acid                 | C9 H8 O3          | -1.01  | 164.047 | 19.28 | 21930236.7 |
| Eriocitrin                      | C27 H32 O15       | 0.75   | 596.174 | 21.40 | 20784279.2 | 6482891.28 |
| Compound                                      | Formula    | MW  | RT  | RRT | RRI   | Int.     |
|----------------------------------------------|------------|-----|-----|-----|-------|----------|
| 5-Acetylsalicylic acid                       | C9 H8 O4   | 116.74 | 180.063 | 19.42 | 20119255.3 |
| Columbianetin acetate                        | C16 H16 O5 | -0.7 | 288.099 | 21.07 | 17533432.0 | 13646169.7 |
| Gardenoside                                  | C17 H24 O11 | -0.63 | 404.131 | 19.11 | 16795785.1 |
| Asperulosidic acid                           | C18 H24 O12 | -0.97 | 432.126 | 17.68 | 16273042.4 |
| Pedunculoside                                | C36 H58 O10 | 70733.8 | 696.408 | 28.45 | 8830054.85 |
| Isosakuranetin                               | C16 H14 O5 | -0.85 | 286.083 | 25.59 | 8789192.23 | 39907908.6 |
| Quercetin 3-O-β-D-Glucuronide                | C21 H18 O13 | 0.28 | 478.074 | 21.07 | 8659611.53 | 8567864.68 |
| Naringin dihydrochalcone                     | C27 H34 O14 | -0.45 | 582.194 | 21.59 | 7144876.05 |
| Purpurin                                     | C14 H8 O5  | -0.41 | 256.037 | 24.79 | 6773169.26 | 15466781.6 |
| 4',7-Di-O-methylnaringenin                   | C17 H16 O5 | -2.03 | 300.099 | 27.95 | 5831158.05 |
| Isosakuranin                                 | C22 H24 O10 | -133933 | 388.116 | 25.20 | 4322368.93 |
| Linderalactone                               | C15 H16 O3 | -0.58 | 244.109 | 32.70 | 33732451.8 |
| Compound                  | Formula      | Log P | MW    | Retention Time (min) | m/z | Precursor Charge |
|---------------------------|--------------|-------|-------|----------------------|-----|-----------------|
| Sweroside                 | C16 H22 O9   | -0.5  | 358.126 | 18.49                | 3   | 6               |
| Demethoxyyangonin         | C14 H12 O3   | -0.09 | 228.078 | 20.99                | 4   | 4               |
| 5-Hydroxy-1-tetralone     | C10 H10 O2   | -0.44 | 162.068 | 18.89                | 6   | 3               |
| Homoorientin              | C21 H20 O11  | 0.43  | 448.100 | 20.86                | 4   | 7               |
| Isopimpinellin            | C13 H10 O5   | -0.23 | 246.052 | 30.02                | 2   | 3               |
| Abscisic acid             | C15 H20 O4   | -0.13 | 264.136 | 20.46                | 6   | 7               |
| Glabrolide                | C30 H44 O4   | 0.62  | 468.324 | 33.34                | 9   | 8               |
| Isosinensetin             | C20 H20 O7   | 0.15  | 372.121 | 29.26                | 8   | 8               |
| Xanthotoxol               | C11 H6 O4    | -0.28 | 202.026 | 22.98                | 1   | 4               |
| Isofraxidin               | C11 H10 O5   | -1.15 | 222.052 | 22.50                | 7   | 2               |
| Xanthoxyline              | C10 H12 O4   | -0.59 | 196.073 | 18.49                | 3   | 3               |
| Isoeugenol acetate        | C12 H14 O3   | -0.85 | 206.094 | 24.05                | 3   | 6               |
| Eupatilin                 | C18 H16 O7   | -0.4  | 344.089 | 31.22                | 2   | 3               |
| Compound                                      | Formula | log P | MW   | Partition Coefficient | pIC50  |
|-----------------------------------------------|---------|-------|------|------------------------|--------|
| 5-Hydroxymethylfurfural                       | C6 H6 O3| 0.06  | 126.031 | 2.046                  | 307178816. |
| Adenine                                       | C5 H5 N5| 0.44  | 135.054 | 1.642                  | 267101172. |
| 4-Methylnumbelliferone                        | C10 H8 O3| -0.42 | 176.047 | 17.77                  | 243072840. |
| 5,7,3'-Trihydroxy-6,4',5'-trimethoxyflavone    | C18 H16 O8| -0.84 | 360.084 | 28.29                  | 234123381. |
| 3-Butylenaphthalide                           | C12 H12 O2| 0.23  | 188.083 | 29.63                  | 219047278. |
| Ginkgolic Acid C15:1                           | C22 H34 O3| -0.2  | 346.250 | 48.31                  | 197533247. |
| Arglabin                                       | C15 H18 O3| -0.24 | 246.125 | 34.87                  | 167397516 |
| Nicotinic acid C6 H5 N2                       | C6 H5 N O2| 0.51  | 123.032 | 2.888                  | 354857458. |
| Paeonol                                        | C9 H10 O3| -0.05 | 166.063 | 17.77                  | 384603084. |
| Stachydrine                                    | C7 H13 N O2| 0.26  | 143.094 | 1.637                  | 392220851 |
| Dihydrotanshinone I                            | C18 H14 O3| -0.07 | 278.094 | 36.75                  | 303491839 |
| Compound                    | Formula     | Log P  | MW   | %E  | Retention Time | Mass  |
|-----------------------------|-------------|--------|------|-----|----------------|-------|
| α-Linolenic acid            | C18 H30 O2  | -0.28  | 278.224 | 6  | 178403347      |
| Hispidulin                  | C16 H12 O6  | -0.77  | 300.063 | 6  | 871490764.0    |
| Cantharidin                 | C10 H12 O4  | -0.52  | 196.073 | 8  | 689049564.0    |
| Ferulaldehyde               | C10 H10 O3  | -0.23  | 178.063 | 8  | 619807575.0    |
| Skimmin                     | C15 H16 O8  | -1.56  | 324.084 | 3  | 609761669.0    |
| Wilforlide A                | C30 H46 O3  | -0.37  | 454.344 | 7  | 590879065.0    |
| Astragalin                  | C21 H20 O11 | -0.66  | 448.100 | 6  | 513132604.0    |
| Cinnamaldehyde              | C9 H8 O     | -0.6   | 132.057 | 9  | 162455788.0    |
| Iridin                      | C24 H26 O13 | 0.42   | 522.137 | 5  | 120873168.0    |
| Coptisine chloride          |             |        | 319.084 | 3  | 49307841.1     |
| Curcumeneol                 | C15 H22 O2  | 0.1    | 234.162 | 9  | 48708353.2     |
| Curcumol                    | C15 H24 O2  | 0.06   | 236.177 | 5  | 48478538.9     |
| Anisic aldehyde             | C8 H8 O2    | -0.1   | 136.052 | 5  | 47255489.9     |
| Compound                                | Molecular Formula | **R** | **m/z** | **MI** | **P** |
|-----------------------------------------|-------------------|------|--------|-------|------|
| Cinnamic acid                           | C9 H8 O2          | -0.2 | 148.052| 4     | 1    |
| Senkyunolide A                          | C12 H16 O2        | -0.12| 192.115| 7     |      |
| 3,5-Dimethoxy-4-hydroxybenzaldehyde    | C9 H10 O4         | -0.25| 182.057| 9     | 33.98|
| Sinensetin                              | C20 H20 O7        | 0.07 | 372.120| 9     | 30.82|
| 5-O-Demethylnobiletin                   | C20 H20 O8        | -0.28| 388.115| 7     | 29.54|
| Coumarin                                | C9 H6 O2          | -0.36| 146.036| 7     | 21.48|
| Quercetin                               | C15 H10 O7        | -1.32| 302.042| 3     | 21.59|
| 4-Methyl-6,7-dihydroxycoumarin          | C10 H8 O4         | -1.17| 192.042| 7     | 22.16|
| 18 β-Glycyrrhethinic Acid               | C30 H46 O4        | -1.17| 38292.2| 6     | 26.97|
| Decursinol                              | C14 H14 O4        | -0.11| 246.089| 2     | 30.50|
| Germacrone                              | C15 H22 O         | -0.05| 218.167| 1     | 34.02|
| Isoquercitrin                           | C21 H20 O12       | 0.07 | 464.095| 5     | 19.09|
| Compound                             | Formula      | Mass (amu) | Prec. (ppm) | Delt (ppm) | Intensity (u.a.) |
|-------------------------------------|--------------|------------|-------------|------------|-----------------|
| α-Cyperone                          | C15 H22 O    | 82553.7    | 236.177     | 27.58      | 71160496.3      |
| L-Phenylalanine                     | C9 H11 N O2  | 0.48       | 165.079     | 20.16      | 67135672.7      |
| 2-Hydroxy-4-methoxybenzaldehyde     | C8 H8 O3     | -0.66      | 152.047     | 21.53      | 67057122.3      |
| Demethyleneberberine                | C19 H17 N O4 | -0.53      | 323.115     | 22.57      | 125950784       |
| Cafestol                            | C20 H28 O3   | -0.9       | 316.203     | 25.86      | 2244172.74      |
Supplementary Figure 1. The information about disease network

(A) protein-protein interaction network of AMD

(B) protein-protein interaction network of AMD
**Supplementary Figure 2.** Functional enrichment analysis of GO biological process of different kinds of diseases

(A) Functional enrichment analysis of GO biological process of different kinds of AMD

(B) Functional enrichment analysis of GO biological process of different kinds of DR

The result of GO biological processes can be viewed by terms across input gene lists with a p-value < 0.01, a minimum count of 3

**Supplementary Figure 3.** The cell viability of drug attack cell

(A) Determination of the concentration of H₂O₂ (n = 3)

(B) Determination of the concentrations of HXMM (n = 3)

(C) Determination of the concentrations of positive control (n = 3)