One-pot synthesis of spirochromanone-based
3-hydroxy-4H-chromen-4-ones
by a modified Algar–Flynn–Oyamada reaction
and evaluation of their antimicrobial activity

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SUPPLEMENTARY INFORMATION

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7'-Hydroxy-8'-phenyl-3'H-spiro[cyclohexane-1,2'-pyrano[3,2-g]chromene]-4',6'-dione (5a):
8'-(4-Fluorophenyl)-7'-hydroxy-3'H-spiro[cyclohexane-1,2'-pyranoo[3,2-g]chromene]-4',6'-dione (5b):
8'-(4-Chlorophenyl)-7'-hydroxy-3'H-spiro[cyclohexane-1,2'-pyrano[3,2-g]chromene]-4',6'-dione (5d):
8’-(4-Bromophenyl)-7’-hydroxy-3’H-spiro[cyclohexane-1,2’-pyrano[3,2-g]chromene]-4’,6’-dione (5e):
7'-Hydroxy-8'-(p-tolyl)-3'H-spiro[cyclohexane-1,2'-pyran-3,2'-chromene]-4',6'-dione (5f)
7'-Hydroxy-8'-(4-methoxyphenyl)-3'H-spiro[cyclohexane-1,2'-pyrano[3,2-g]chromene]-4',6'-dione (5g):