

## **ICCVAM Revised Recommended Substance List for the Evaluation of *In Vitro* Test Methods for Identifying Potential Endocrine Disruptors.**

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NICEATM recently reviewed the commercial availability and cost for the 78 substances recommended by ICCVAM for use in *in vitro* ER and AR binding and TA validation studies. A minimum of 44 substances are recommended for AR binding and TA assays, while a minimum of 53 substances are recommended for ER binding and TA assays. This review indicated that three substances [anastrozole, CGS 18320B, fadrozole] are not commercially available, one substance has restricted commercial availability [ICI 182,780], and the cost to conduct a validation study with six others [actinomycin D, hydroxyflutamide, 4-hydroxytamoxifen, methyltrienolone, 12-*O*-tetradecanoylphorbol-13-acetate, zearalenone] was considered to be relatively expensive (>\$2000/lab). ICCVAM subsequently replaced the four original substances that are not commercially available or have restricted availability with ones having similar ER and AR activity profiles [4-hydroxyandrostenedione, chrysin, dicofol, raloxifene HCl]. Suitable replacements (19-nortestosterone and resveratrol) were identified to replace two of the six expensive substances, methyltrienolone and zearalenone, respectively. NICEATM also preferred to replace the other four expensive substances but was unable to identify suitable replacements because of their unique activity profiles and/or chemical/physical properties. The revised list of reference substances has now been published\*, and is being used for validation of *in vitro* ER TA methods by NICEATM, ECVAM, and JaCVAM. Supported by NIEHS Contract N01-ES-85424.

\**Addendum to the ICCVAM Evaluation of In Vitro Test Methods for Detecting Potential Endocrine Disruptors: Estrogen Receptor and Androgen Receptor Binding and Transcriptional Activation Assays.* available at <http://iccvam.niehs.nih.gov>.

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