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HR EXCELLENCE IN RESEARCH

3-(2-((3*S*,10*R*,13*S*)-3-hydroxy-10,13-dimethyl-2,3,4,7,8,9,10,11,12,13,14,15-dodecahydro-1*H*-cyclopenta[*a*]phenanthren-17-yl)-2-oxoethyl)-1-vinyl-1*H*-imidazol-3-ium chloride with antitumor activity against prostate cancer

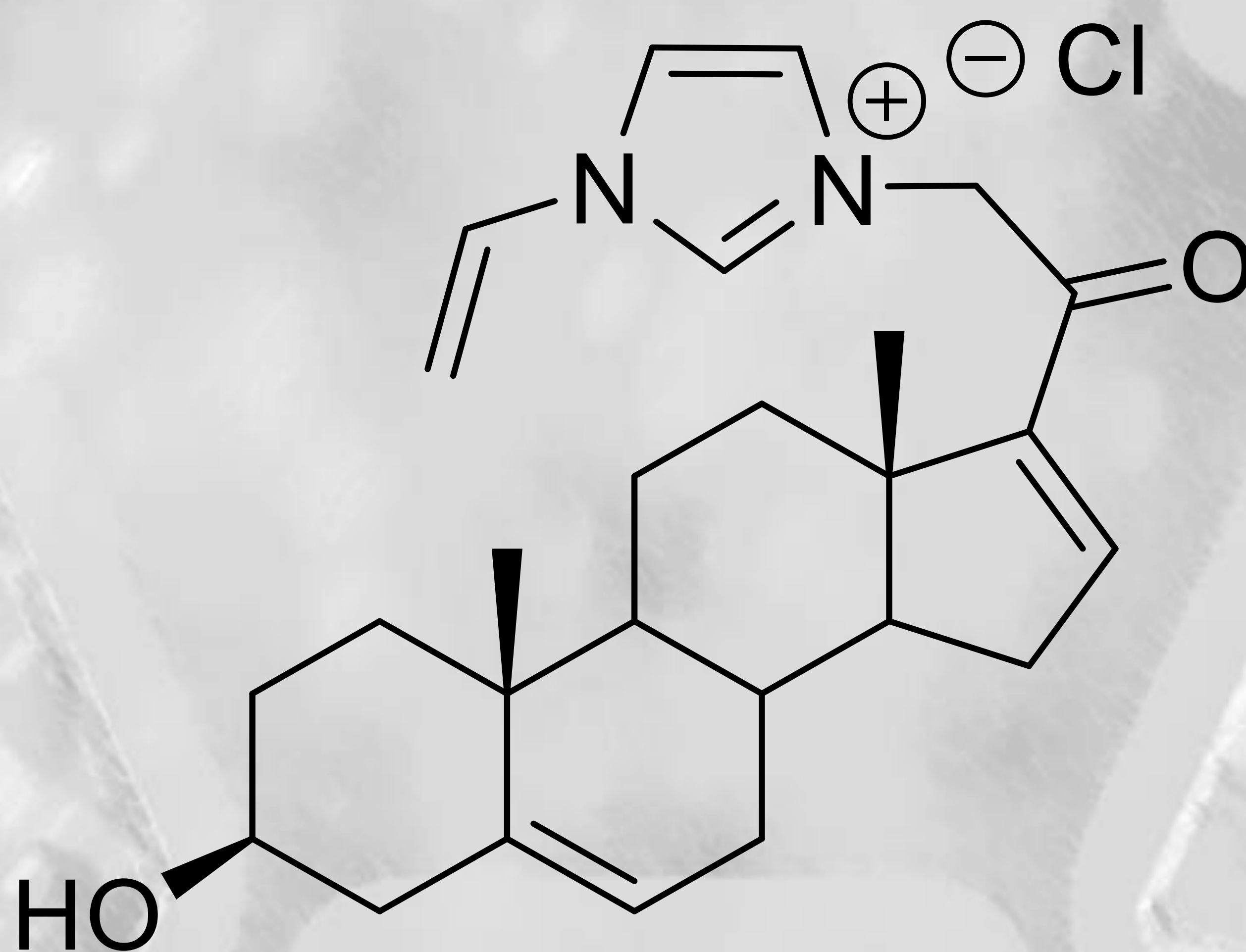
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APPLICATION FIELDS: Chemistry and Pharmacy

AIM: Expanding the steroid class of drugs with antitumor activity against prostate cancer with CYP17A inhibitory action.

SOLUTION: The compound of the invention showed antitumor activity against prostate cancer at a concentration of $1.57 \pm 0.24 \mu\text{M}$.



ADVANTAGES: The compound 3-(2-((3*S*,10*R*,13*S*)-3-hydroxy-10,13-dimethyl-2,3,4,7,8,9,10,11,12,13,14,15)-dodecahydro-1*H*-cyclopenta[*a*]phenanthren-17-yl)-2-oxoethyl)-1-vinyl-1*H*-imidazol-3-ium chloride is easily synthesized from readily available reagents. At the same time, the compound is characterized by an increased antitumor activity against prostate cancer

IMPLEMENTATION STAGE: Laboratory level

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