## 1038

STUDY ON THE EFFECT OF DDAVP ON FACTOR VIII-RELATED PROPERTIES IN HEMOPHILIA AND VWD
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Twenty-one patients affected by mild and moderate Hemophilia A as well as 9 patients with the classic form of vonWillebrand's disease (vWD) were given a total of 58 infusions of DDAVP. Concerning Hemophilia a three fold mean raise ( $\bar{x}$= 3.0, sem 0.19; range of ratios post/preinfusion 1.35 - 5.55) of factor VIII:C levels was observed after the infusion of 0.3 µg/Kg b.w. A mean raise of 3.44 ( sem 0.48, range 2.20 - 6.7) after the infusion of 0.4 µg/Kg was found. The difference between the two regimens is not statistically significant ($p > 0.5$). As to the vWD 18 infusions were given. In 6 patients the changes of factor VIII:C, VIIIR:Ag and VIII:vWF were roughly consensual ( ratios post/preinfusion ranging from 2.2 to 4.0 for VIII:C; from 1.8 to 3.5 for VIIIR:Ag and from 3.1 to 6.2 for VIII:vWF). In the remaining 3 patients a very strong response of VIII:C ( ratios post/preinfusion 12.0, 15.1 and 6.5) was observed. Also the other properties related to factor VIII underwent to relevant increase. In one of these patients a modified electrophoretic mobility of factor VIII was found; the other two (father and doughter) had a normal factor VIII mobility after stimulation with DDAVP.

## 1039

STUDY ON LONG TERM TOLERANCE AND RECOVERY OF COLD STERILIZED PPSB IN CHIMPANZEES.
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Recent experiments have shown, that PPSB (factor IX-concentrate) derived from ß-propiolactone/ultraviolet(ß-PL/UV)-treated (cold sterilized)plasma is not infectious in chimpanzees in respect to hepatitis B and Non A-Non B. To answer the question whether the ß-PL/UV treatment influences the tolerance and efficacy of the cold sterilized PPSB-concentrate, long term application of PPSB-Biotest was performed in chimpanzees.

After 12 applications of 25 units factor IX/kg in weekly intervals no signs of intolerance were observed by means of skintesting and observation of blood pressure during i.v. application. Determination of coagulation factor activity during the application period shows the same factor IX-recovery at the beginning and at the end of the study.

## 1040

THROMBOGENICITY RESULTS OF COLD STERILIZED (ß-PROPIOLACTONE/ULTRAVIOLET IRRADIATION) PPSB IN CHIMPANZEES.
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In vitro tests were demonstrated to be insufficient for the determination of the thrombogenicity of PPSB preparations with peptide substrates or the $TGt_{50}$ and the NAPTT. Unequivocal determinations of the thrombogenicity of PPSB preparations are possible only up to now in in vivo models. As an alternative to the up to now proposed dog or hemophilia B dog models we have determined the thrombogenicity of cold sterilized PPSB in chimpanzees. PPSB isolated from ß-propiolactone treated and UV irradiated plasma was injected into the chimpanzees at a dose of approximately 100 units/kg body weight. An FDA licensed PPSB preparation served as a control.

15 minutes, 1 h, 4 h, and 24 h after the PPSB application the following parameters were determined in the chimpanzee blood: factors II, VII, IX, X, VIII, fibrinogen, AT III, thrombin coagulase, Quick value, APTT and platelet count.

Neither the untreated control preparation nor the PPSB from ß-propiolactone treated and UV irradiated plasma showed signs of a thrombogenic effect in this chimpanzee model.

## 1041

**THROMBOGENICITY OF ANTIHEMOPHILIAC PREPARATIONS WITH FACTOR VIII INHIBITOR BYPASSING ACTIVITY.**
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**In hemophilia A patients with inhibitor to Factor VIII, prothrombin complex, concentrates were found effective in treating hemorrhagic episodes. However, in several patients DIC or thromboembolic complications developed. Some of the manufacturers have altered production methods eliminating certain activated coagulation factors from the preparations. After these modifications some of these preparations were found to be less effective clinically. In the first study, we compared potential thrombogenicity of two preparations: Autoplex and FEIBA and as control prothrombin complex preparation with no appreciable activated factor content (Prothromplex) for the ability to induce thrombosis in an isolated segment of the renal vein of $C_{57}BL6(J)$, ICR/HA male mice, and Sprague-Dawley male rats. The minimum thrombosis inducing dose was 200 prothrombin complex units per kilogram of Prothromplex, 25 FEIBA units of FEIBA and 0.45 FEIBA units of Autoplex. The fact that Autoplex is approximately 51 times more active than FEIBA can probably be explained by the fact that the latter contains more factor IXa and Xa activity than the former.**