

HIPNOTICI ("LEKOVI ZA SPAVANJE")

-SUPSATNICE KOJE PRIVREMENO SMANJUJU AKTIVNOST CENTRALNOG NERVNOG SISTEMA, IZAZIVAJU POSPANOST I PODPOMAŽU NASTAJANJE I ODRŽAVANJE STANJA SNA.

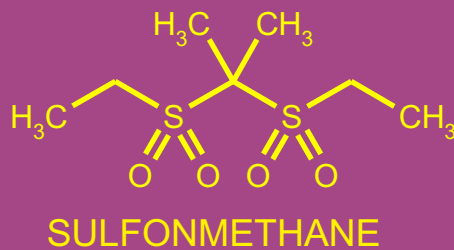
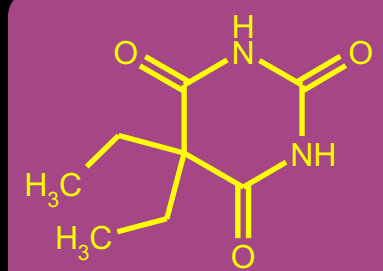
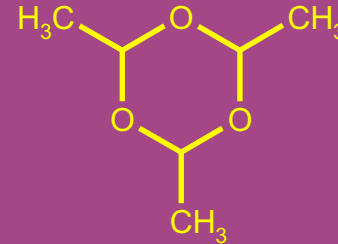
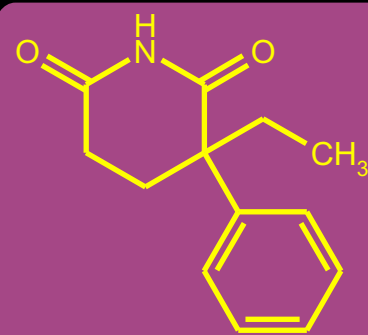
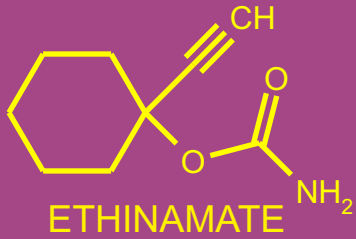
-SAN DO KOGA DOLAZI POD DEJSTVOM OVIH LEKOVA NOVIJE GENERACIJE, OBIČNO JE SLIČAN PRIRODNOM SNU, UKLJUČUJUĆI TU I NJEGOVE ELEKTRO-ENCEFALOGRAFSKE KARAKTERISTIKE (EEG).

-UKOLIKO SE KORISTE U KONTROLISANIM, TERAPIJSKIM DOZAMA, OSOBA POD DEJSTVOM OVIH PREPARATA, NAJČEŠĆE MOŽE DA SE PROBUDI I DOVEDE U SVESNO STANJE U BILO KOM TRENUTKU. (A NE TEK POŠTO PRESTANE DEJSTVO LEKA).

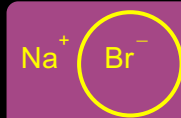
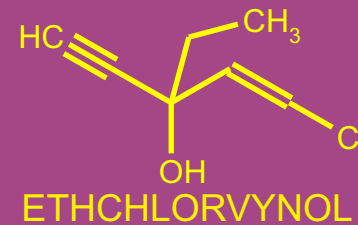
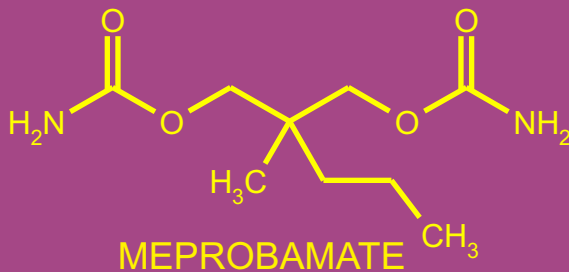
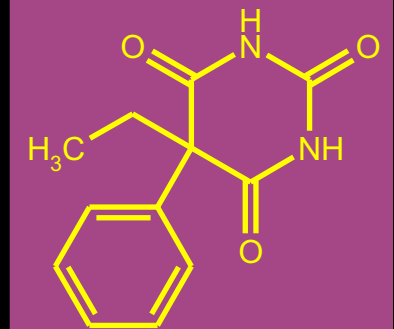
-ZAVISNO OD VRSTE PREPARATA, KAO I OD DOZE, POSTOJE VELIKE RAZLIKE U SPOREDNIM, NEŽELJENIM EFEKTIMA OVIH LEKOVA KOJE UKLJUČUJU: ZAKASNELU POSPANOST, UMOR, MENTALNU KONFUZIJU, LOŠU KONCENTRACIJU, POREMEĆENU KOORDINACIJU POKRETA I DR.

-LEKOVI STARIJE GENERACIJE, A POSEBNO BARBITURATI, IMALI SU VRLO IZRAŽENA NAVEDENA NEŽELJENA DEJSTVA. PORED TOGA, PRI VEĆIM DOZAMA BARBITURATA, PACIJENT LAKO ZAPADA U BESVESNO STANJE, UZ SLABLJENJE OSNOVNIH VITALNIH FUNKCIJA, PRE SVEGA DISANJA. STOGA SU SMRTNI SLUČAJEVI, KAO POSLEDICA SLUČAJNOG ILI NAMERNOG PREDUZIRANJA, BILI RELATIVNO ČESTI. KONSEKVENTNO, LEKOVI STARIJE GENERACIJE DANAS SE KORISTE RETKO, UGLAVNOM KOD HOSPITALIZOVANIH PACIJENATA.

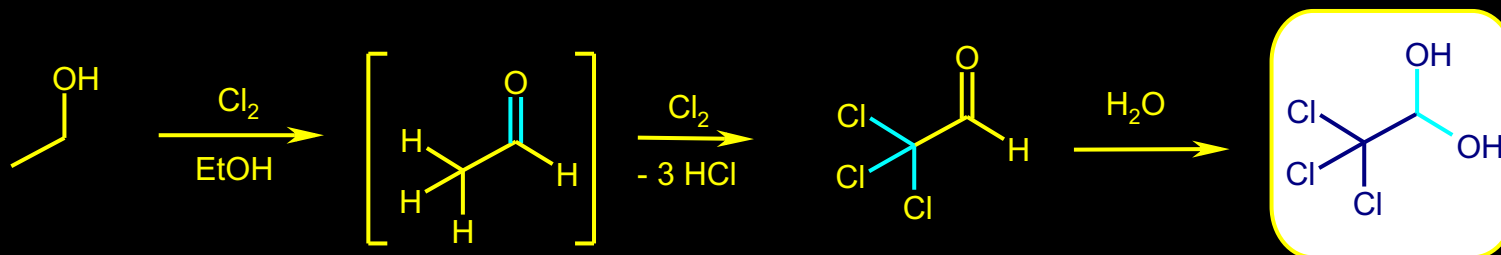
-HIPNOTICI NOVIJE GENERACIJE, KAO POJEDINI BENZODIJAZEPINI I DR., SU RELATIVNO BEZBEDNI I IMAJU ZNAČAJNU PRIMENU.



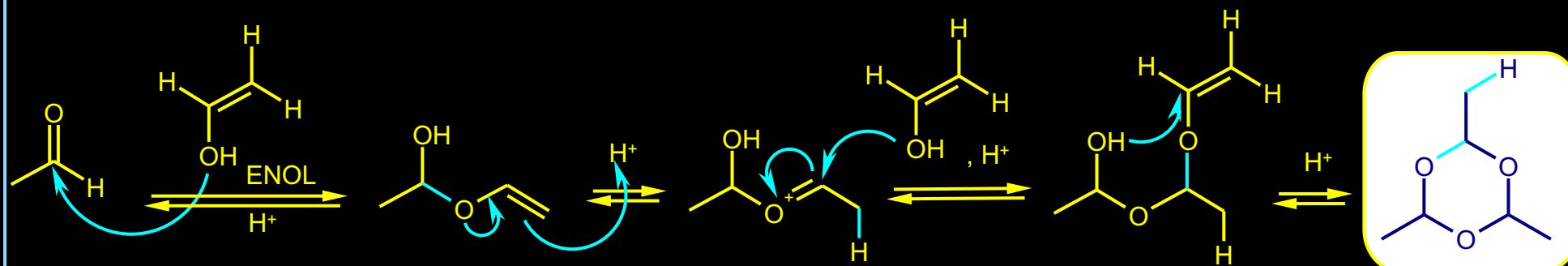
HIPNOTICI STARIJE GENERACIJE
RAZNORODNIH HEMIJSKIH
STRUKTURA



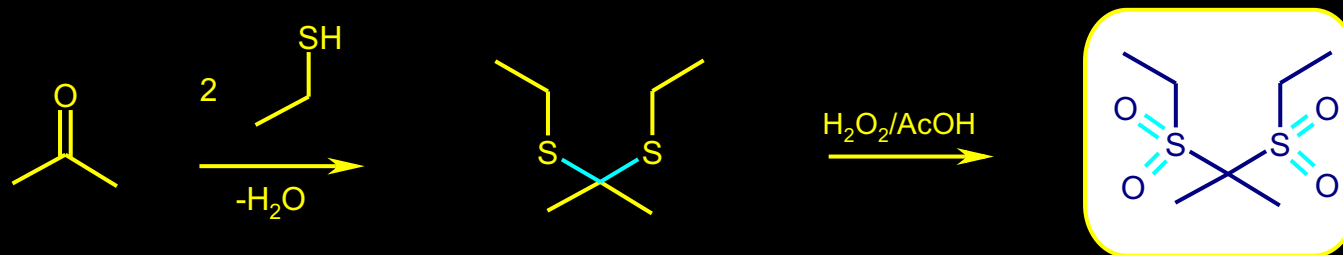
SINTEZE POJEDINIHI HIPNOTIKA STARIJE GENERACIJE



CHLORAL HYDRATE

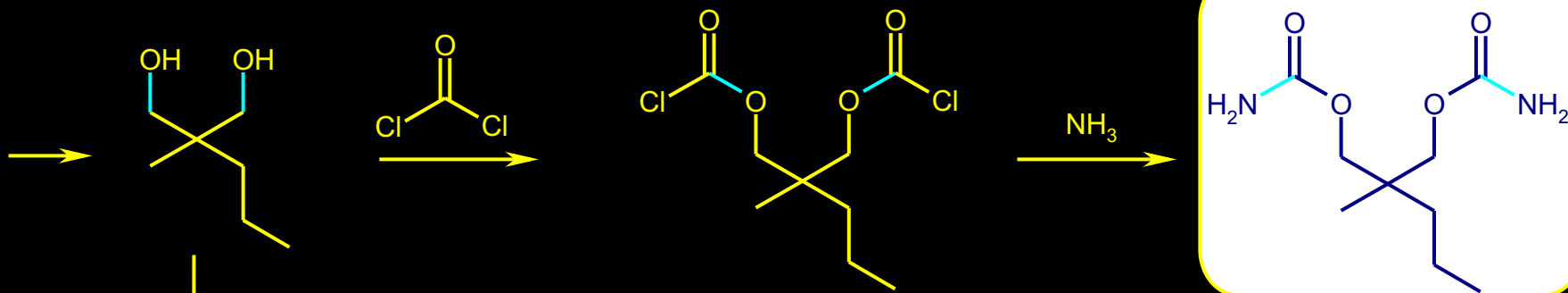
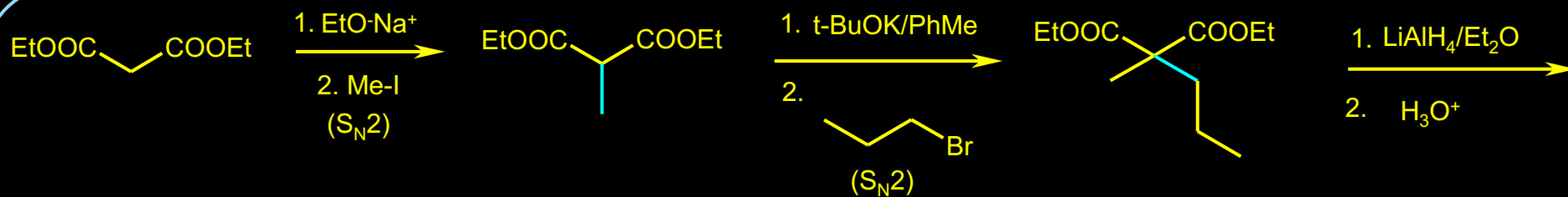


PARALDEHYDE

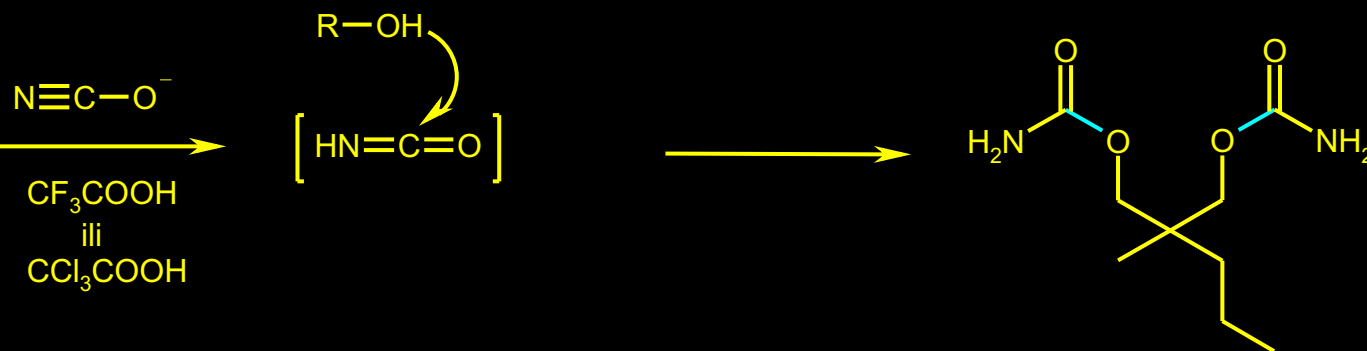


SULFONMETHANE

SINTEZE POJEDINIHI HIPNOTIKA STARIJE GENERACIJE

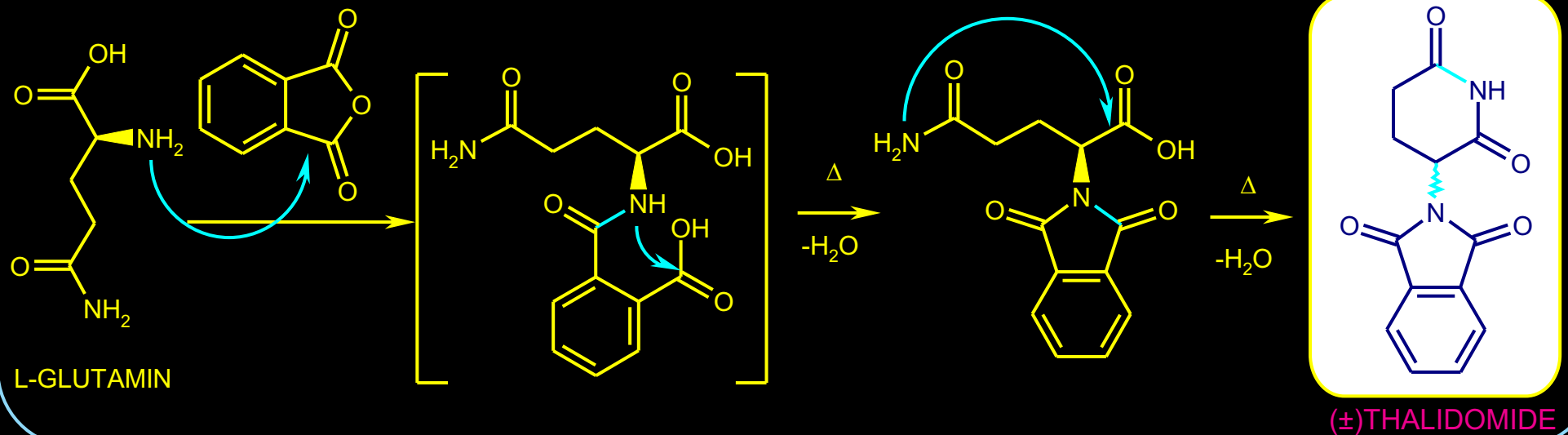
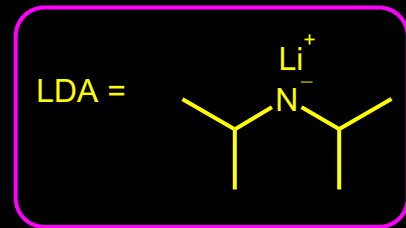
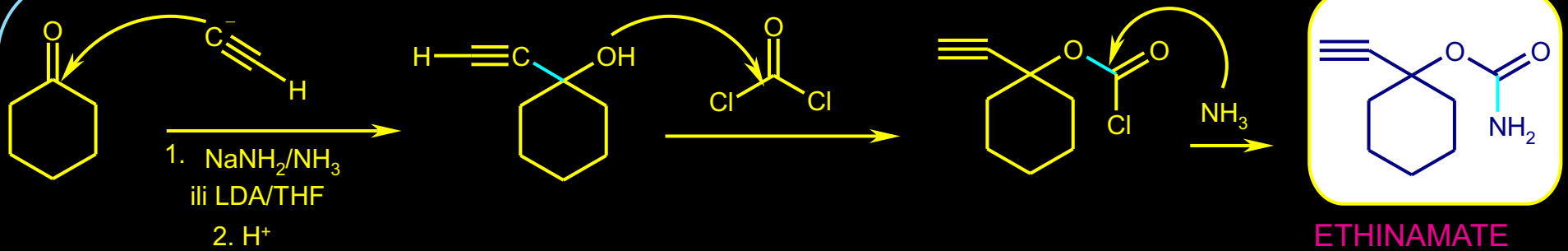


≡



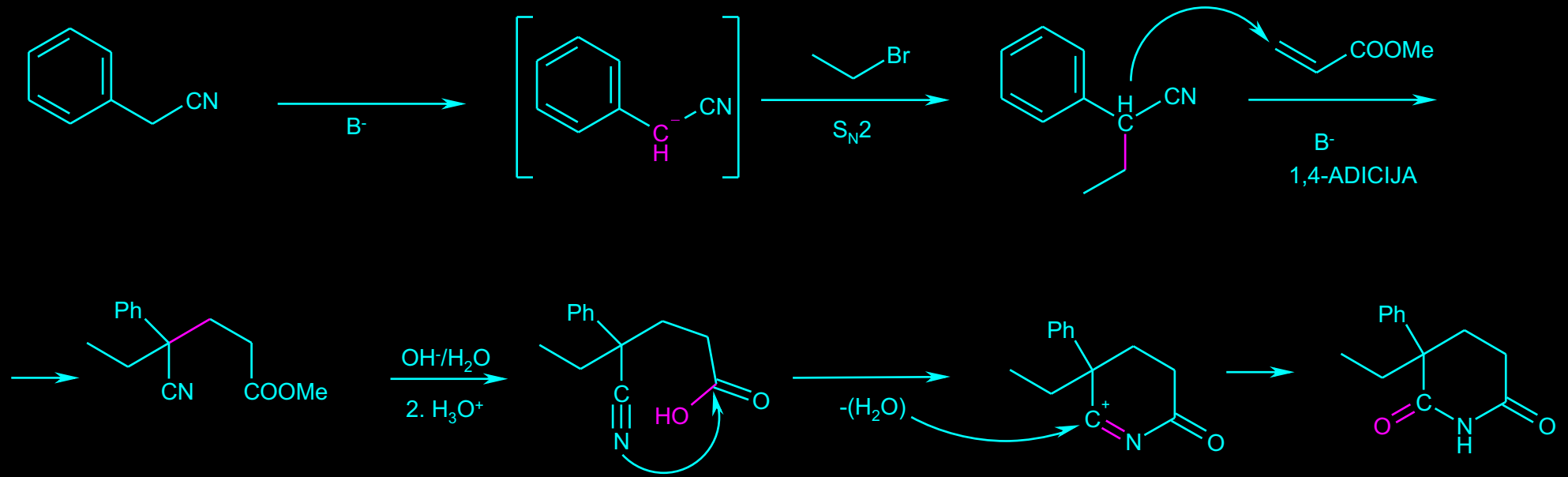
MEPROBAMATE

SINTEZE POJEDINIHI HIPNOTIKA STARIJE GENERACIJE



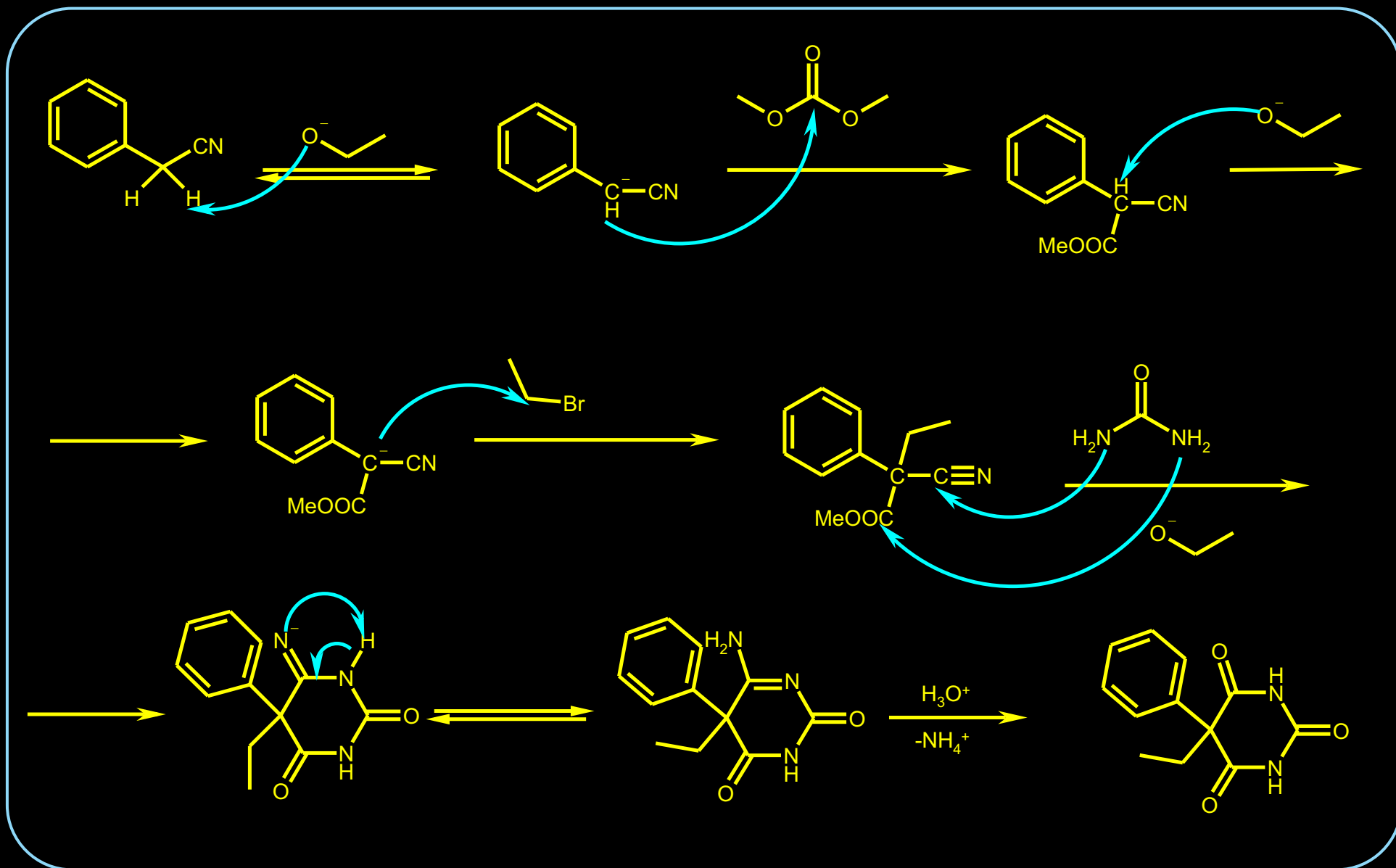
SINTEZE POJEDINIHI HIPNOTIKA STARIJE GENERACIJE

Glutethimide:



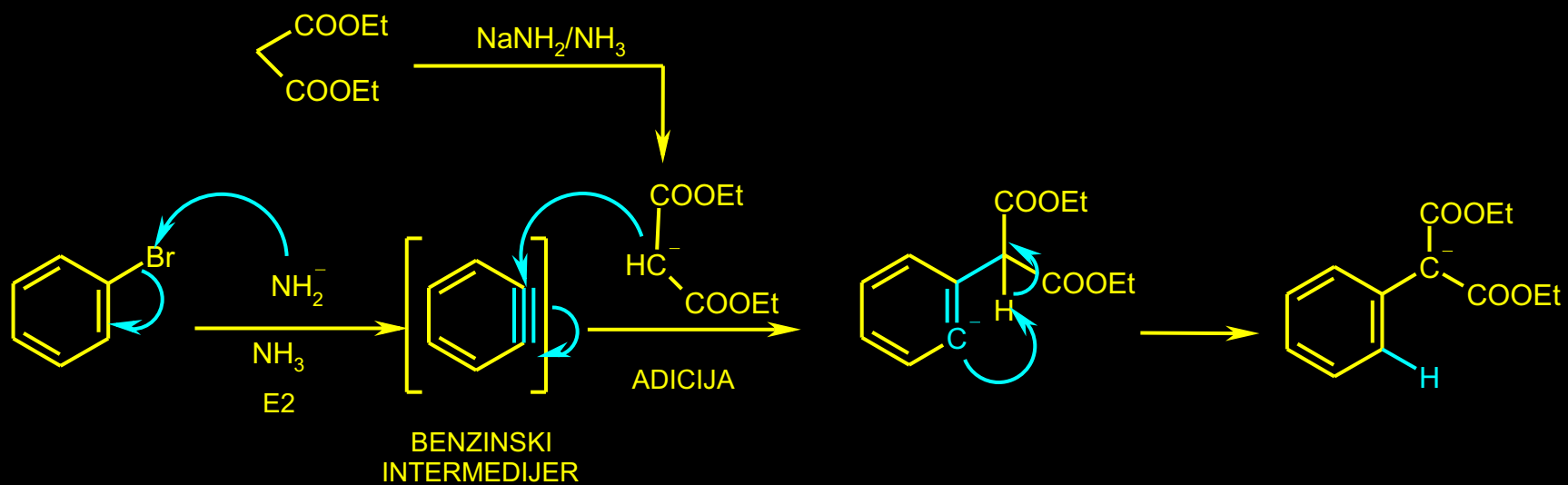
BARBITURATI - HIPNOTICI (SVI BARBITURATI IMAJU SEDATIVNO-HIPNOTIČKO DEJSTVO)

PHENOBARBITAL -SINTEZA



BARBITURATI - HIPNOTICI (SVI BARBITURATI IMAJU SEDATIVNO-HIPNOTIČKO DEJSTVO)

PHENOBARBITAL -ALTERNATIVNA SINTEZA FENIL-MALONSKE KISELINE



BENZODIAZEPINI - HIPNOTICI

NAPOMENA:

NORMALNA METABOLIČKA DEGRADACIJA BENZODIAZEPINA (KAO I MNOGIH DRUGIH LEKOVA KOJI NI STRUKTURNO NI FARMAKOLOŠKI NEMAJU NIKAKVE VEZE SA NJIMA) VRŠI SE DEJSTVOM ENZIMA IZ GRUPE CITOHROMA P450, A POSEBNO ENZIMIMA CYP3A4 I CYP2C19.

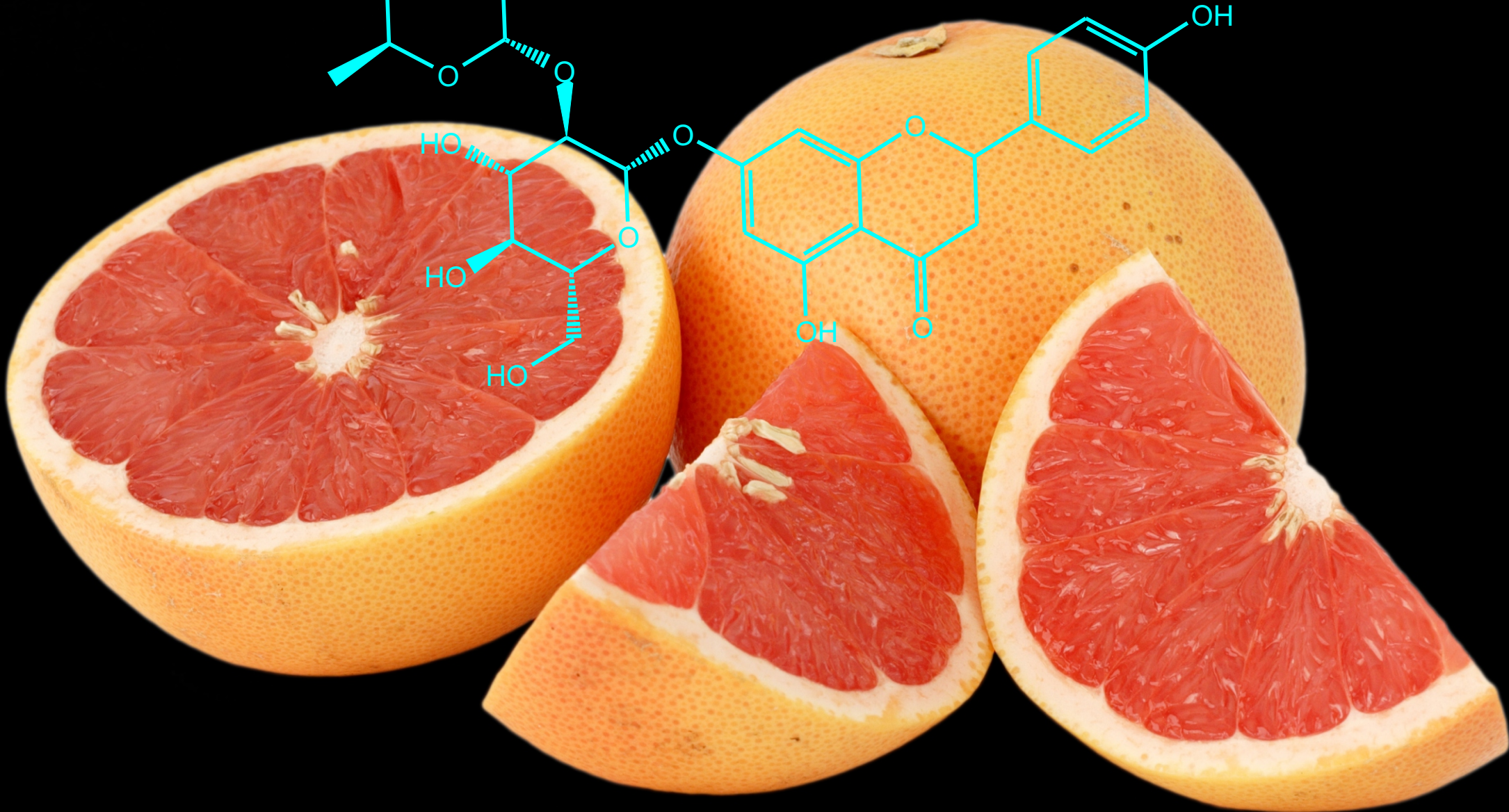
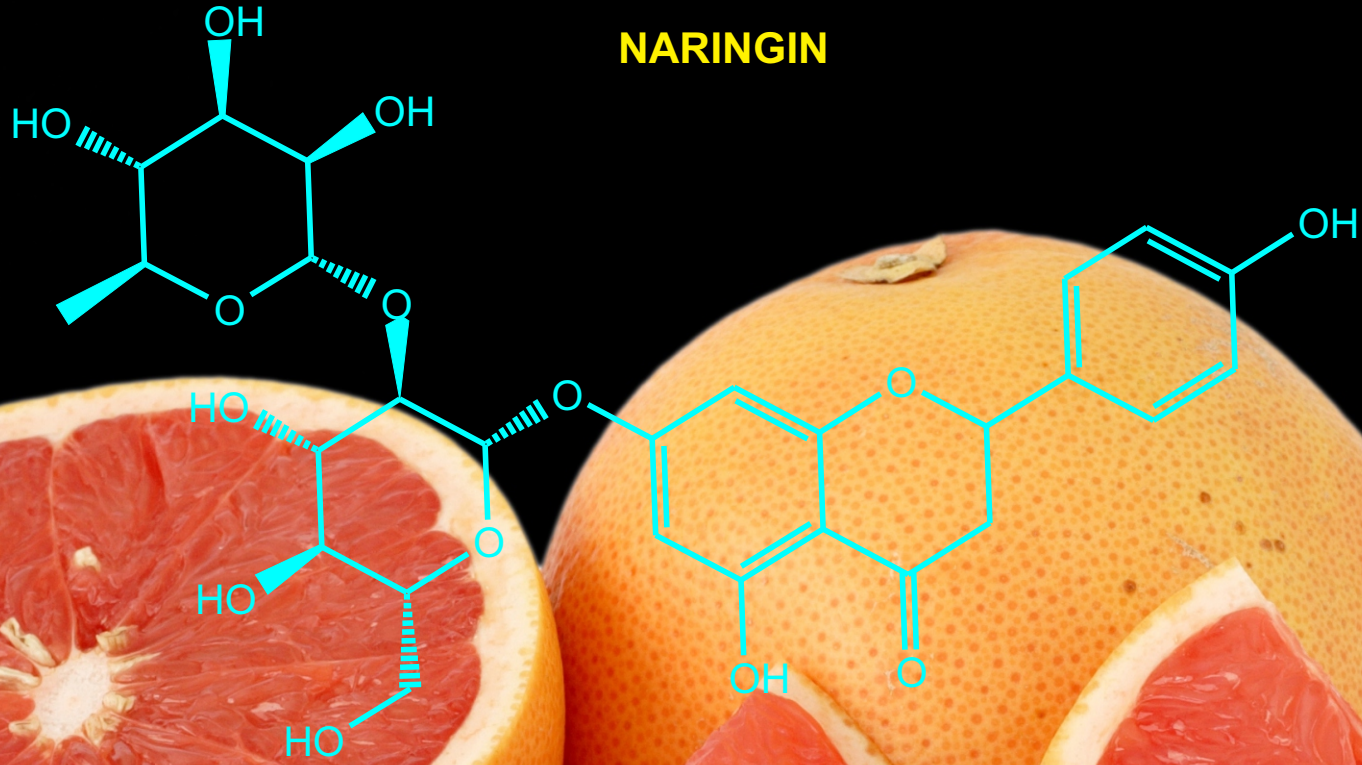
MEĐUTIM, POJEDINI LEKOVI SE PONAŠAJU KAO INHIBITRORI OVIH ENZIMA I MOGU ZNAČAJNO, NEKADA I VRLO OPASNO, DA USPORE METABOLIČKU DEGRADACIJU DRUGIH LEKOVA U ORGANIZMU ČOVEKA.

KONSEKVENTNO, NORMALNE, TERAPIJSKE DOZE RAZLIČITIH LEKOVA, U PRISUSTVU DOLE NAVEDENIH INHIBITORA CITOHROMA P450, MOGU DOVESTI DO NAGOMILAVANJA MNOGOSTRUKO VEĆIH DOZA LEKA U ORGANIZMU NEGO ŠTO JE TO DOZVOLJENO, I TIME AKUTNO UGROZITI ZDRAVLJE I ŽIVOT PACIJENTA.

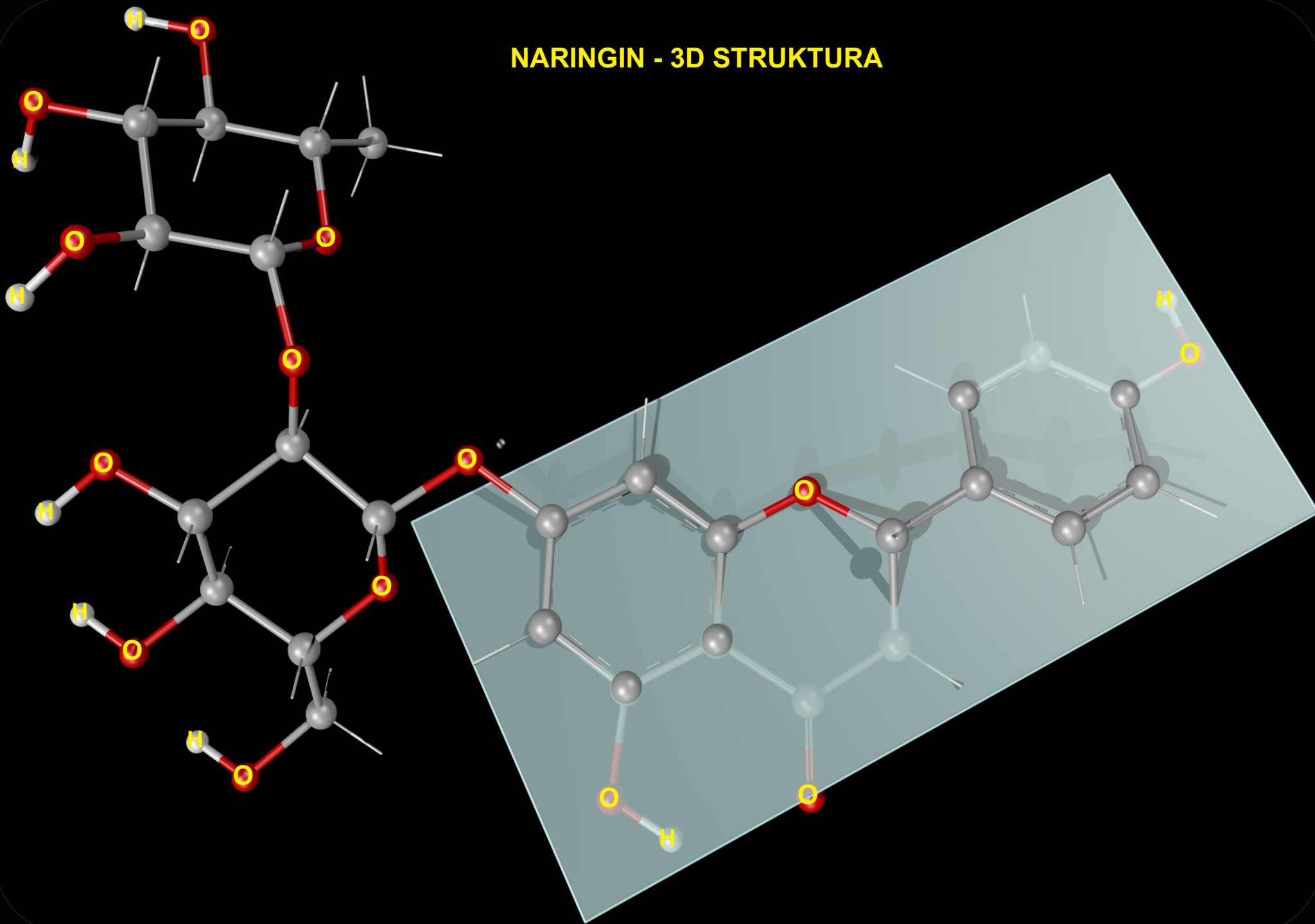
ZNAČAJNIJI LEKOVI KOJI INHIBIRAJU CITOHROM P450: **ERYTHROMYCIN, CLARITHROMYCIN, RITONAVIR, ITRACONAZOLE, KETOCONAZOLE, NEFAZODONE.**

MEĐUTIM, I GREJPFRUT (VOĆE) KAO I SOK OD GREJPFRUTA, SADŽE FLAVONOIDE (POSEBNO NARINGIN), KOJI SU AKTIVNI INHIBITORI CITOHROMA P450, TE MOGU PREDSTAVLJATI AKUTNU OPASNOST PO ZDRAVLJE PACIJENTA, UKOLIKO SE KONZUMIRAJU UPOREDNO SA POJEDINIM LEKOVIMA, UKLJUČUJUĆI I NEKE OD BENZODIAZEPINA.

NARINGIN

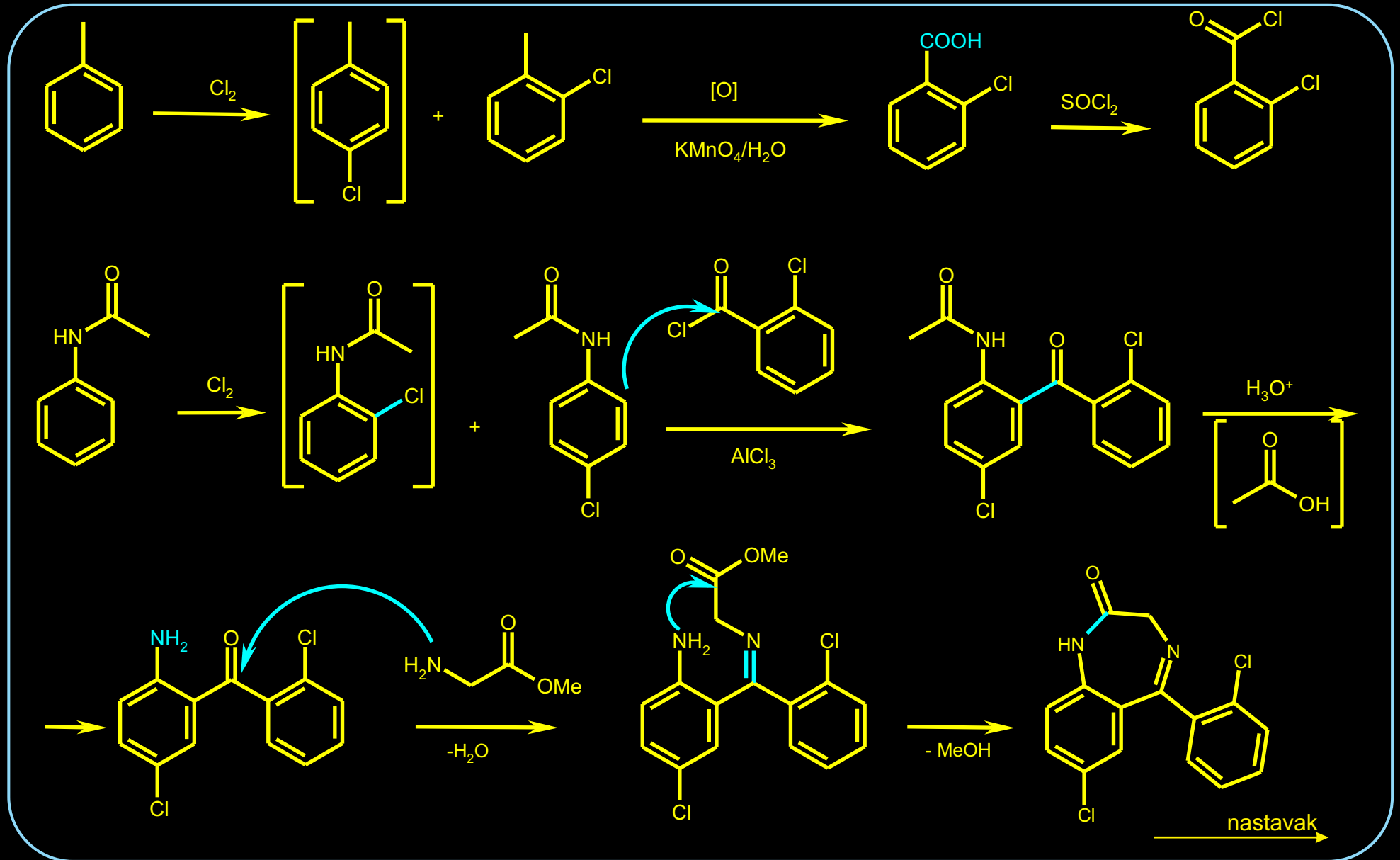


NARINGIN - 3D STRUKTURA



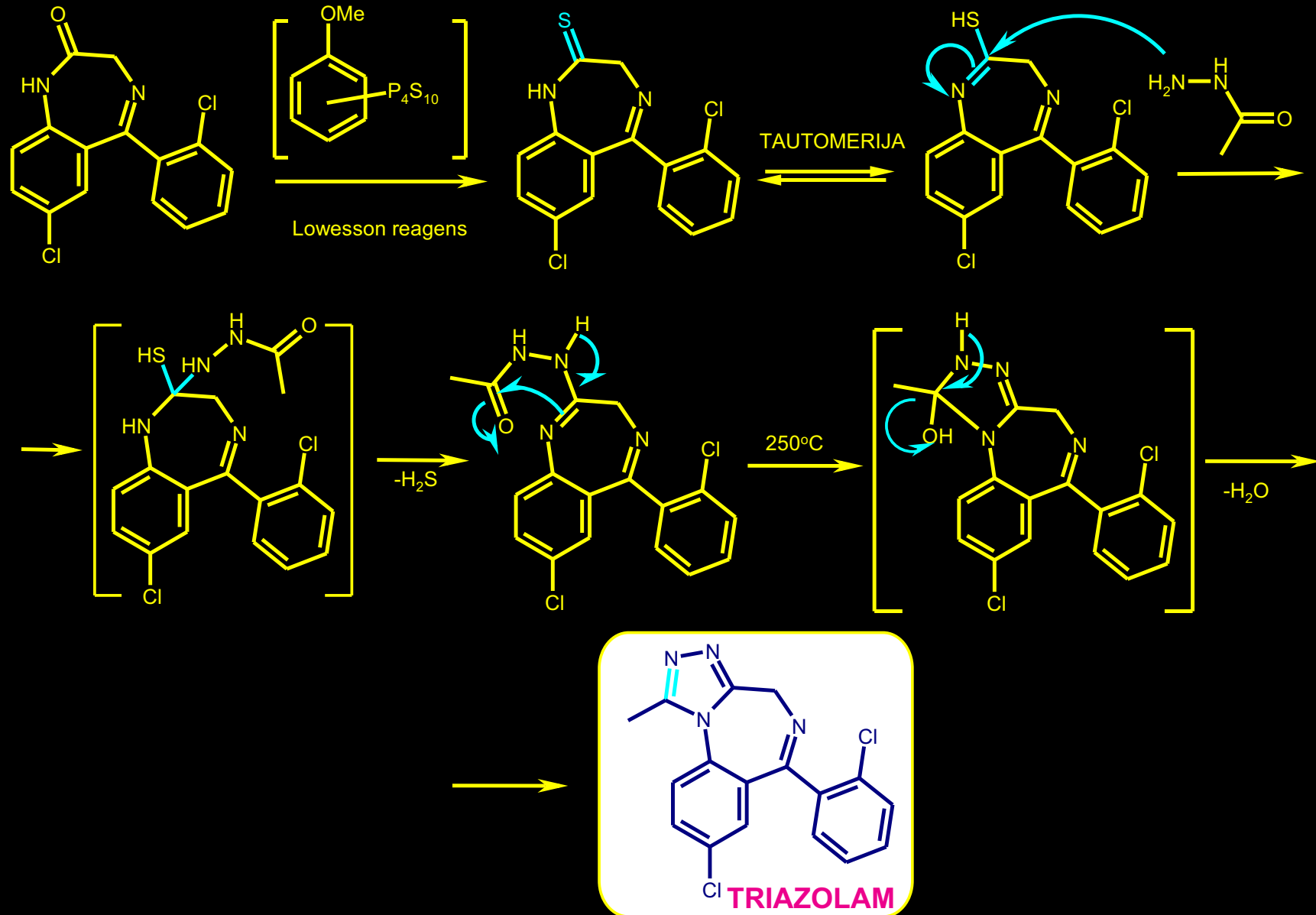
BENZODIAZEPINI - HIPNOTICI

SINTEZA TRIAZOLAM-a



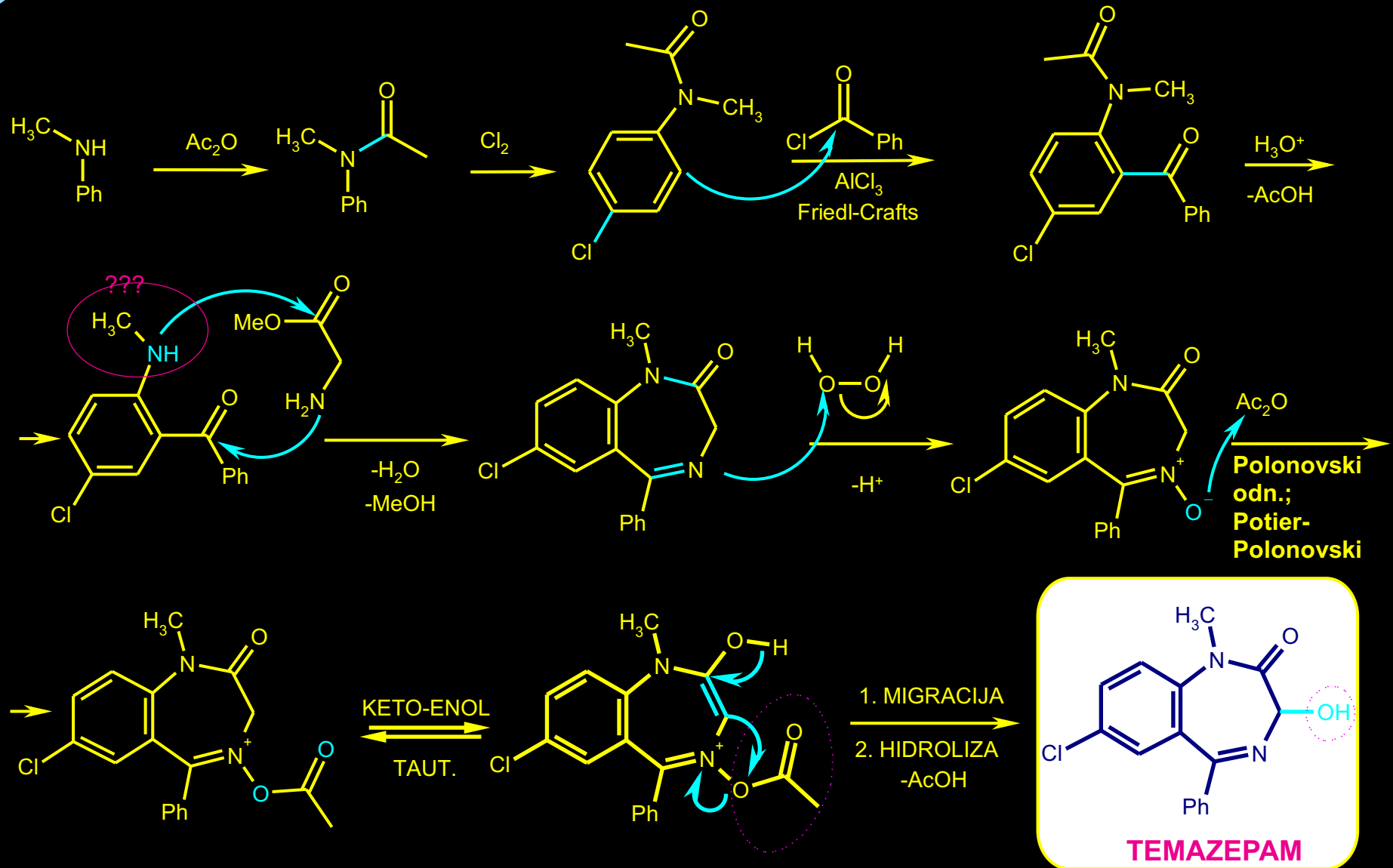
BENZODIAZEPINI - HIPNOTICI

SINTEZA TRIAZOLAM-a nastavak



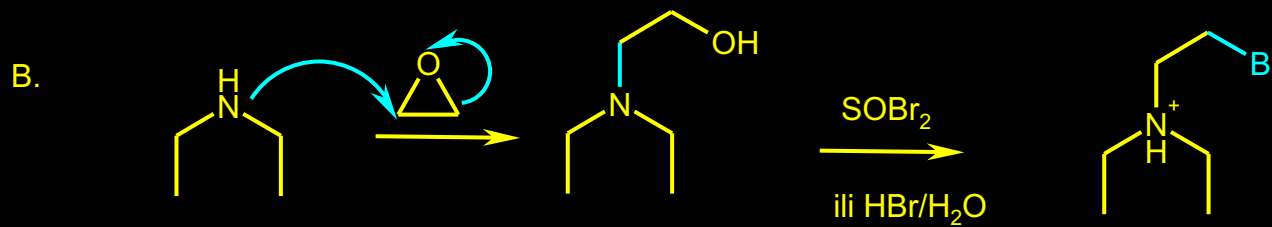
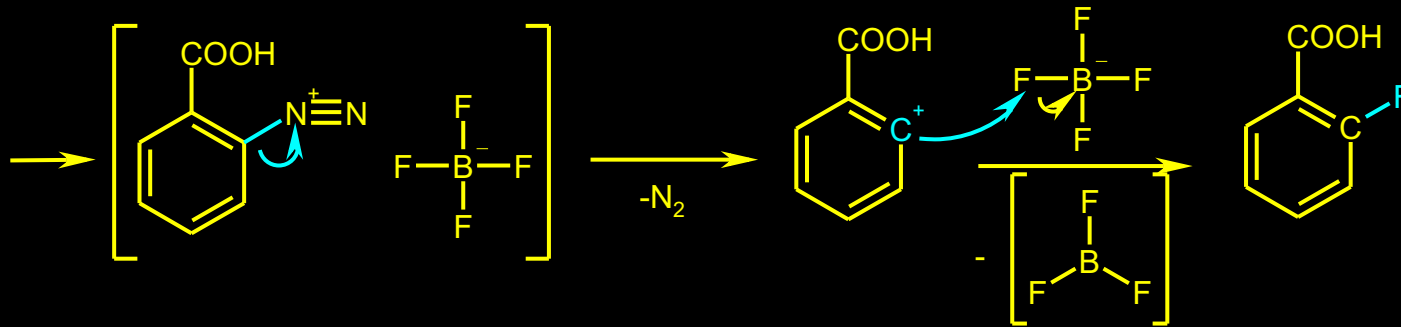
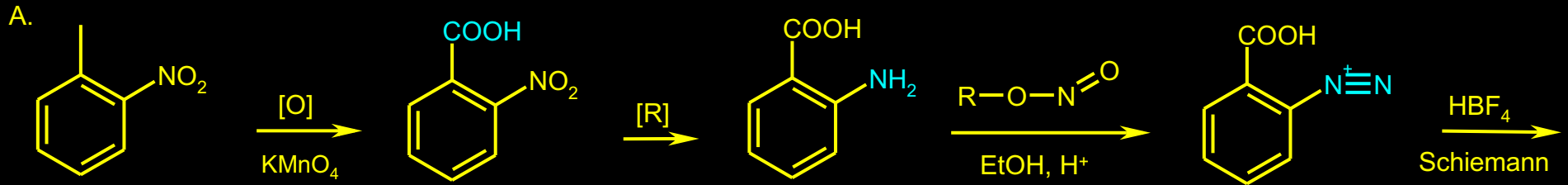
BENZODIAZEPINI - HIPNOTICI

SINTEZA TEMAZEPAM-a



BENZODIAZEPINI - HIPNOTICI

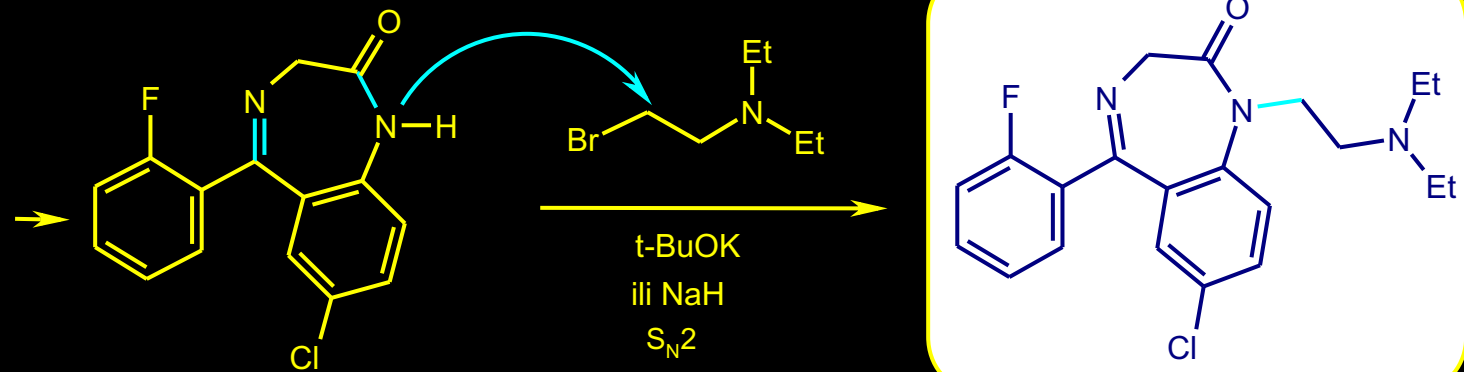
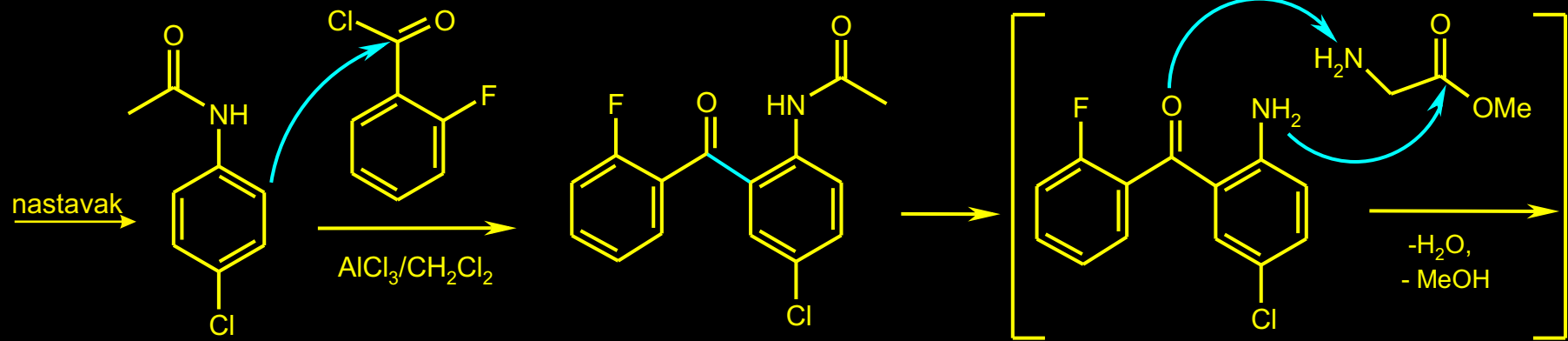
SINTEZA FLURAZEPAMA-a



nastavak

SINTEZA FLURAZEPAMA-a

BENZODIAZEPINI - HIPNOTICI

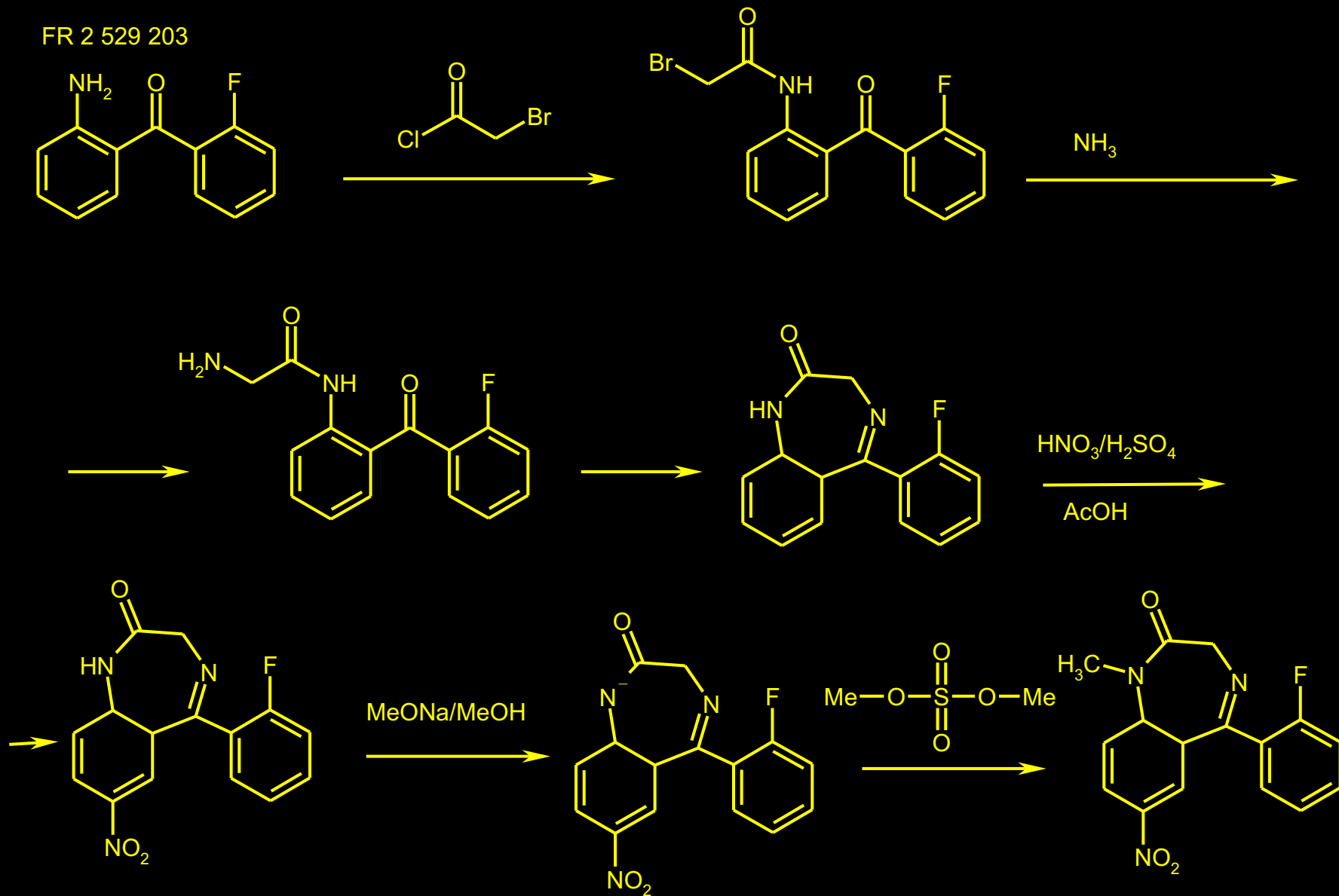


FLURAZEPAM

SINTEZA FLUNITRAZEPAM-a

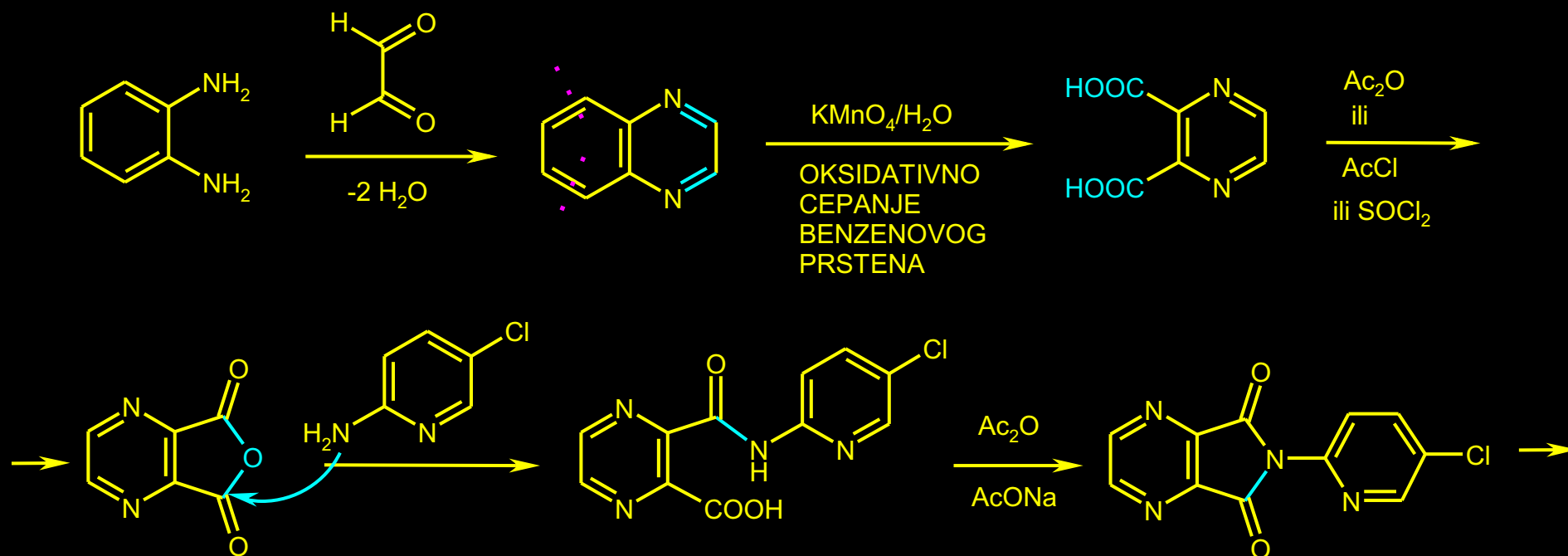
BENZODIAZEPINI - HIPNOTICI

FR 2 529 203



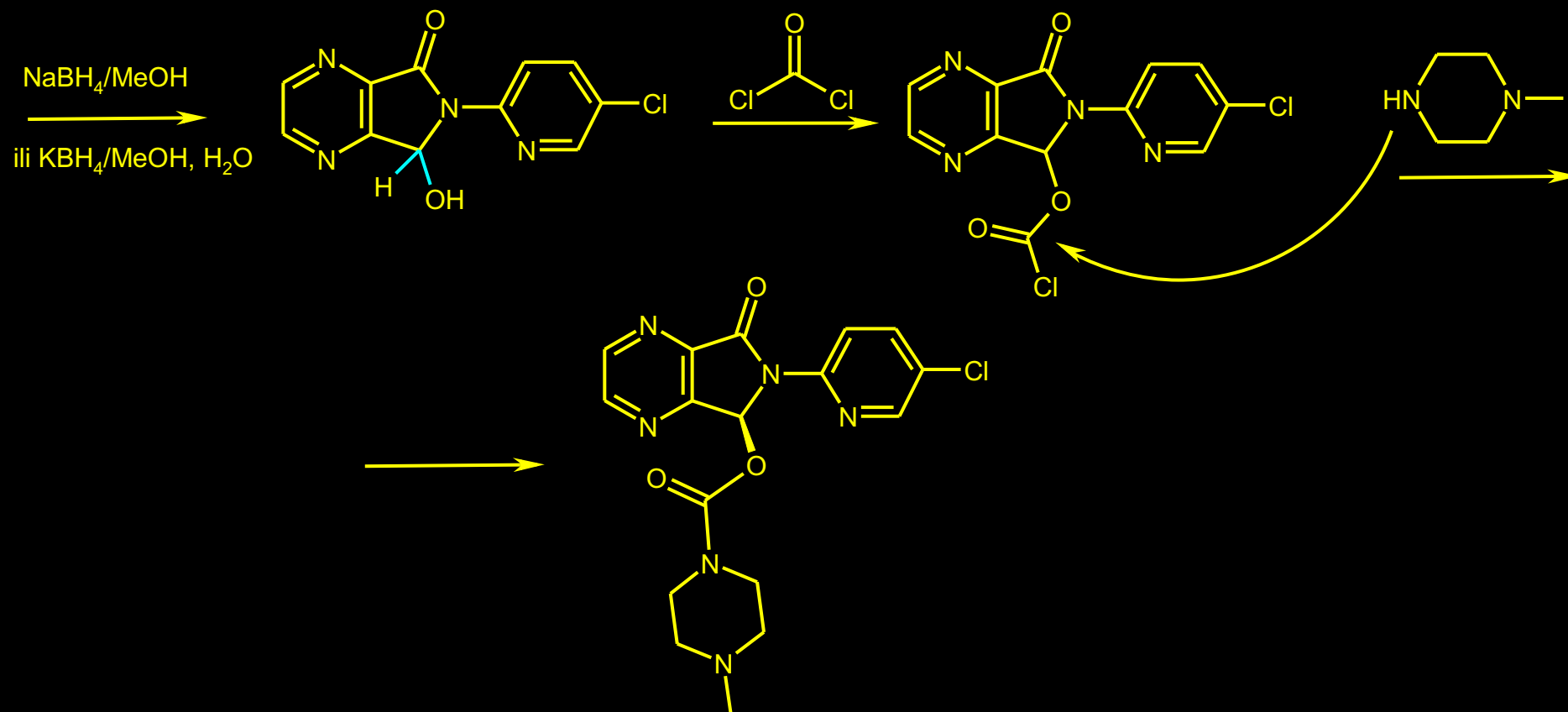
NE-BENZODIAZEPINSKI HIPNOTICI NOVE GENERACIJE

ZOPICLONE



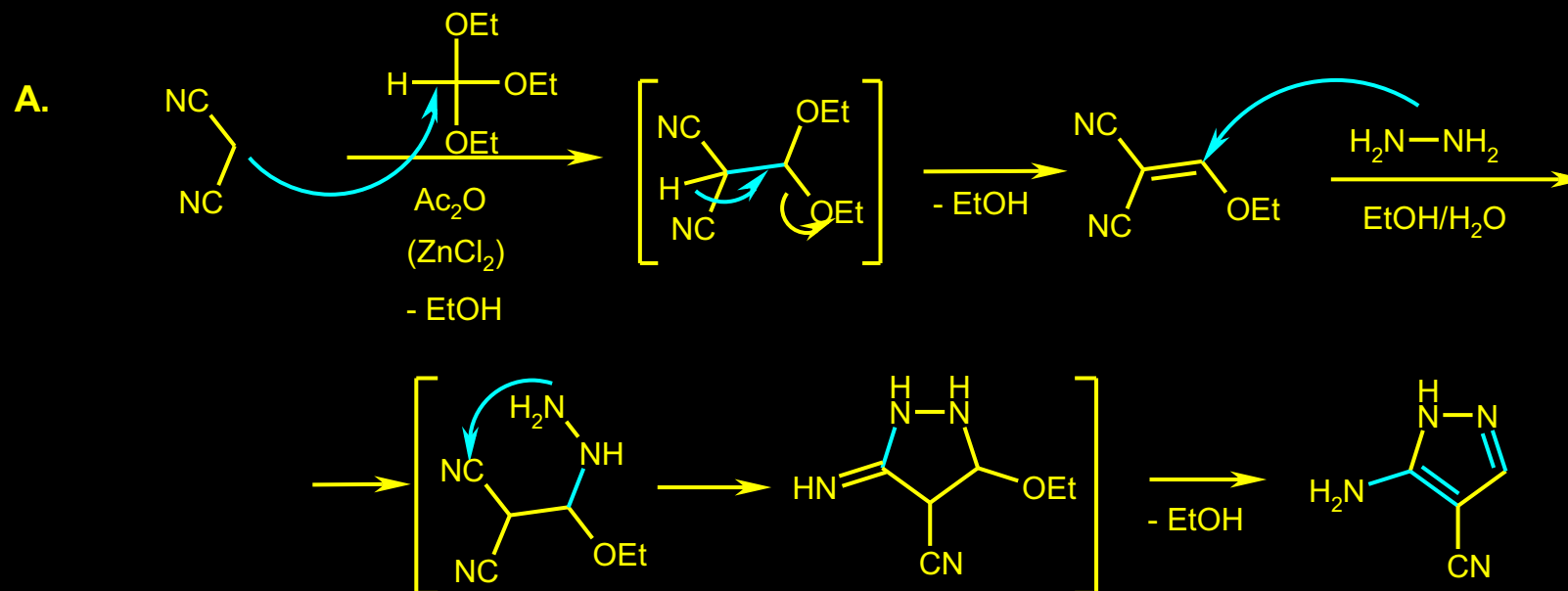
NE-BENZODIAZEPINSKI HIPNOTICI NOVE GENERACIJE

ZOPICLONE -nastavak

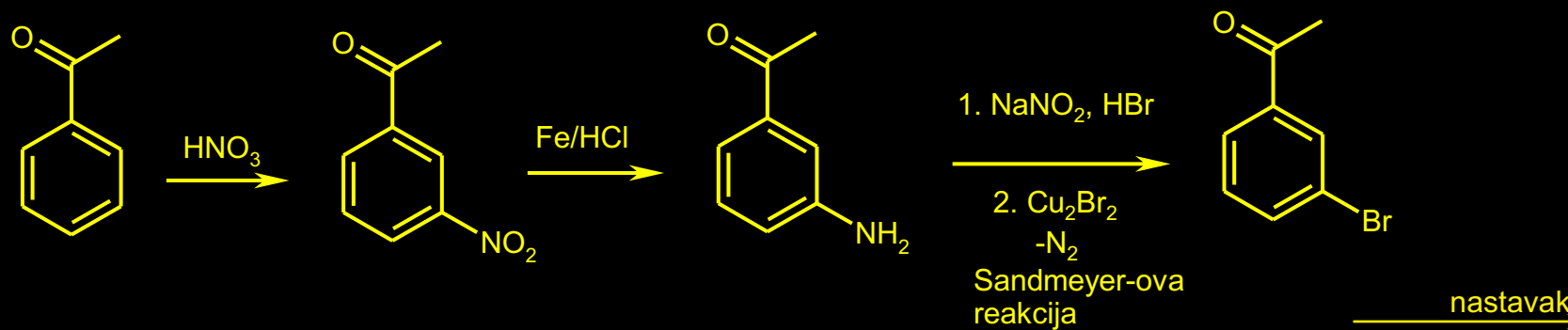


NE-BENZODIAZEPINSKI HIPNOTICI NOVE GENERACIJE

Zaleplon (SONATA)

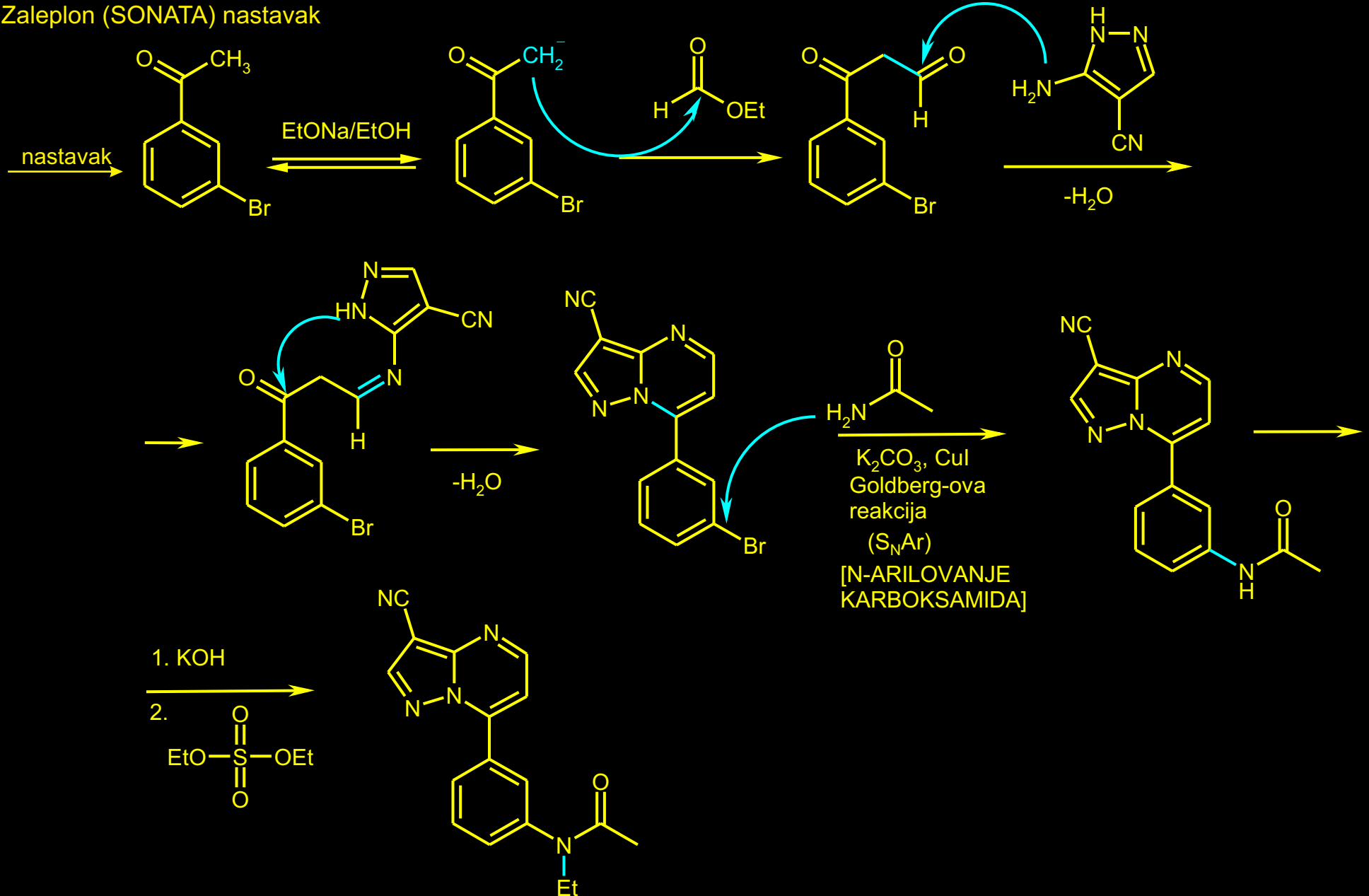


B.

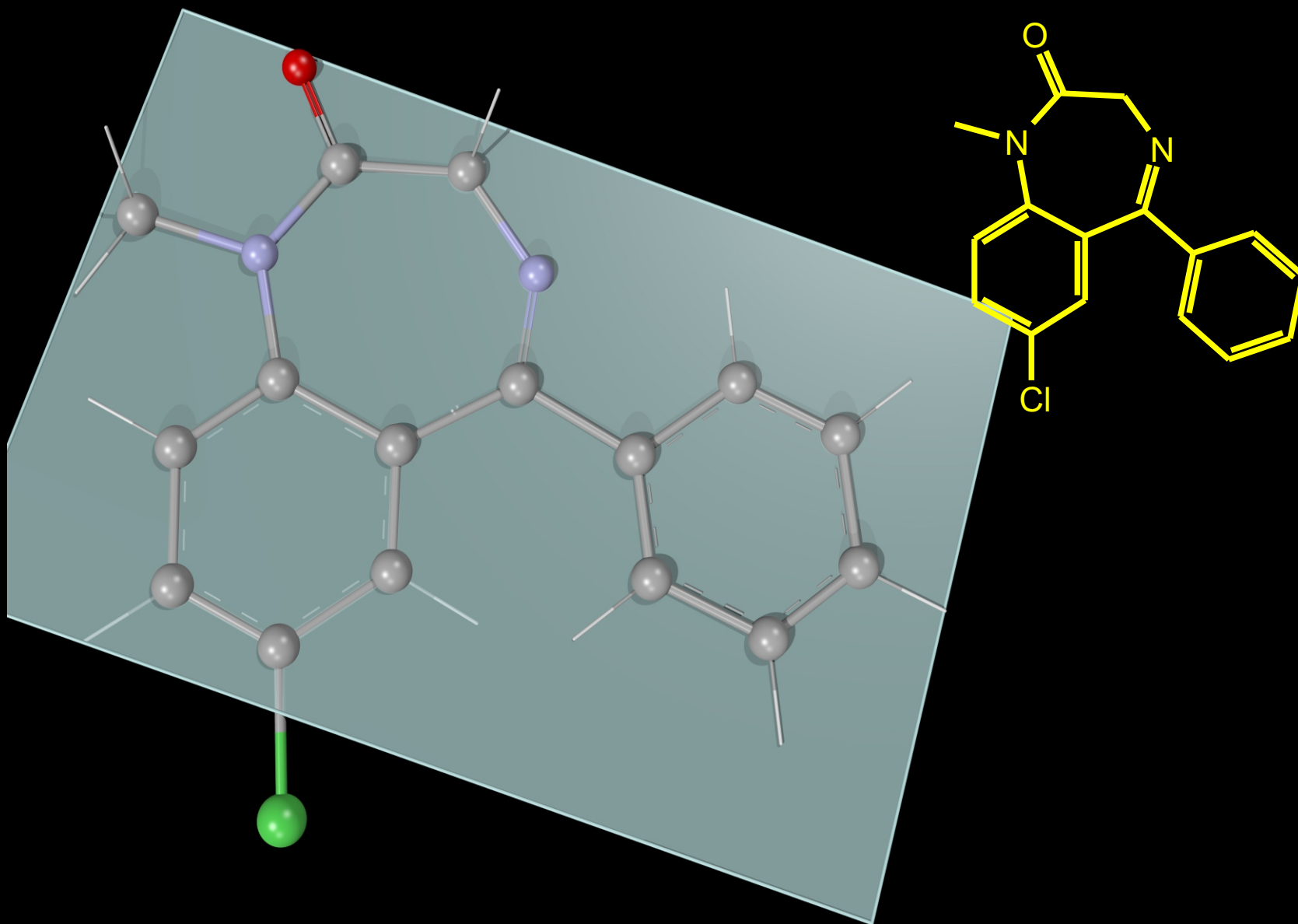


NE-BENZODIAZEPINSKI HIPNOTICI NOVE GENERACIJE

Zaleplon (SONATA) nastavak



ANKSIOLITICI - BENZODIAZEPINI KOJI NE IZAZIVAJU POSPANOST ALI UBLAŽAVAJU “NERVOZU” - STANJA POZNATA KAO ANKSIOZNOST. POGODNI SU ZA DNEVNU UPOTREBU I IZUZETNO SE MNOGO KORISTE.
DIAZEPAM:



ANKSIOLITICI

Monograph Number: 3018

Title: [Diazepam](#)

CAS Registry Number: 439-14-5

CAS Name: 7-Chloro-1,3-dihydro-1-methyl-5-phenyl-2H-1,4-benzodiazepin-2-one

Additional Names: 7-chloro-1-methyl-5-phenyl-3H-1,4-benzodiazepin-2(1H)-one; methyl diazepamone; diacepin

Manufacturers' Codes: LA-III; Ro-5-2807; Wy-3467; NSC-77518

Trademarks: Apaurin; Atensine (Berk); Atilen (Spofa); Bialzepam (Bial); Calmpose (Ranbaxy); Cereglart (Kaken); Dialar (Lagap); Diazemuls (Farmitalia); Dipam (Alkaloid); Eridan; Eurosan (Mepha); Evacalm (Unimed); Faustan (East Germany); Gewacalm (Nycomed); Horizon (Yamanouchi); Lamra (Merckle); Lembrol; Levium (Sodelco); Mandrozep (Henk); Neurolytril (Dorsch); Noan (Ravizza); Novazam (Génévrier); Paceum (Orion); Pacitran (Grossman); Paxate (Bristol-Myers Squibb); Pro-Pam (Protea); Q-Pam (Quantum); Relanium (Polfa); Sedapam (Duncan, Flockhart); Seduxen (Gedeon Richter); Servizioepam (Servipharma); Setonil; Solis (Galen); Stesolid (Dumex); Tranquase (Azupharma); Tranquo-Puren (Klinge-Nattermann); Tranquo-Tablinen (Sanorania); Unisedil (Laquifa); Valaxona (Schaper & Brummer); Valiquid (Roche); Valium (Roche); Valrelease (Roche); Vival; Vivol (Horner)

Molecular Formula: C₁₆H₁₃ClN₂O

Molecular Weight: 284.75.

Percent Composition: C 67.49%, H 4.60%, Cl 12.45%, N 9.84%, O 5.62%

Literature References: Prepn: Sternbach, Reeder, J. Org. Chem. 26, 4936 (1961); Reeder, Sternbach, US 3371085 (1968 to Hoffmann-La Roche); prepd but not claimed: eidem, US 3109843 and US 3136815 (1963, 1964 to Hoffmann-La Roche); M. Gates, J. Org. Chem. 45, 1675 (1980); M. Ishikura et al., ibid. 47, 2456 (1982). Purification: Chase, US 3102116 (1963 to Hoffmann-La Roche). Pharmacology: Hudson, Wolpert, Arch. Int. Pharmacodyn. Ther. 186, 388 (1970). Metabolism: Randall et al., Curr. Ther. Res. Clin. Exp. 7, 590 (1965); Van der Kleijn, Ann. N.Y. Acad. Sci. 179, 115 (1971). Toxicity: E. I. Goldenthal, Toxicol. Appl. Pharmacol. 18, 185 (1971). Binding study in rat brain: R. F. Squires, C. Braestrup, Nature 266, 732 (1977). Comprehensive description: A. MacDonald et al., Anal. Profiles Drug Subs. 1, 79-99 (1972). Clinical pharmacokinetics: M. Mandelli et al., Clin. Pharmacokinet. 3, 72 (1978).

Properties: Plates from acetone + petr ether, mp 125-126°. pKa 3.4. Sol in chloroform, DMF, benzene, acetone, alc; slightly sol in water. LD₅₀ orally in rats: 710 mg/kg (Goldenthal).

Melting point: mp 125-126°

pKa: pKa 3.4

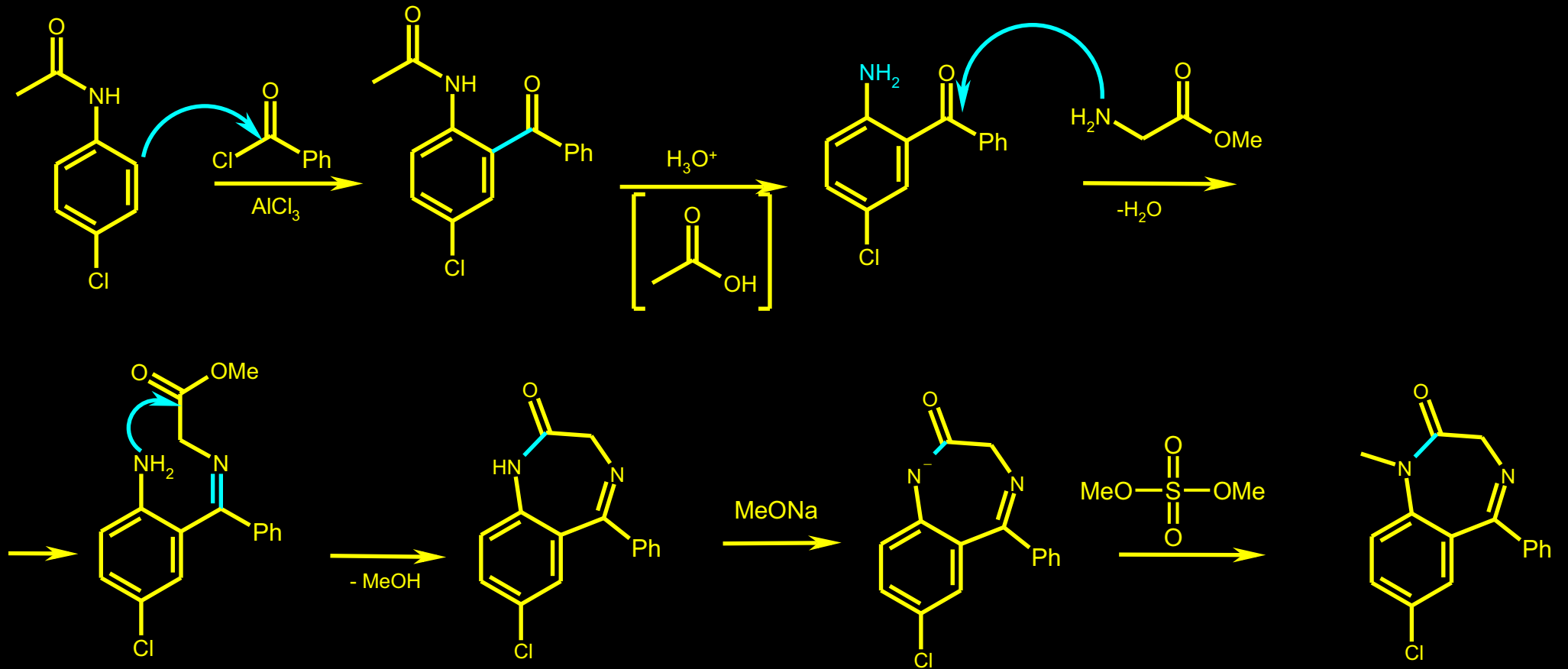
Toxicity data: LD₅₀ orally in rats: 710 mg/kg (Goldenthal)

NOTE: This is a controlled substance (depressant): 21 CFR, 1308.14.

Therap-Cat: [Anxiolytic](#); [muscle relaxant \(skeletal\)](#).

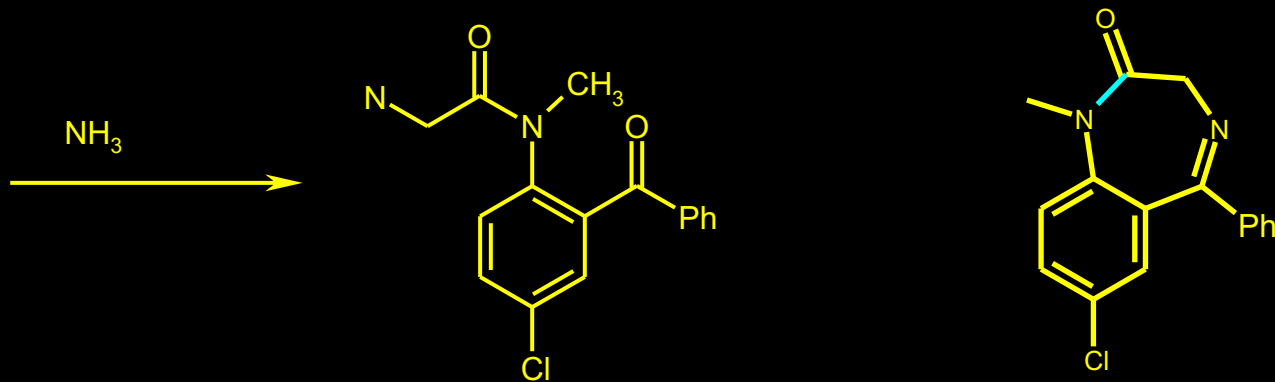
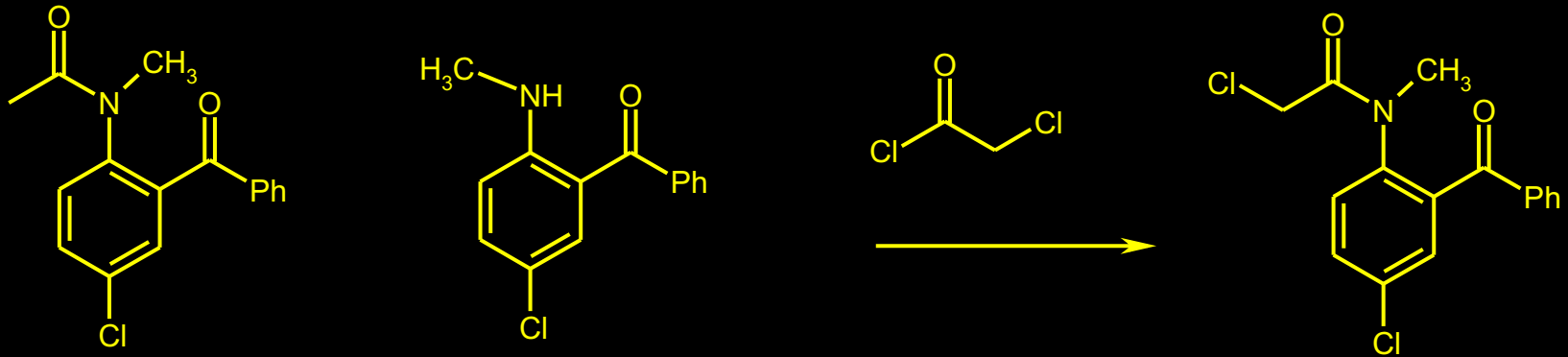
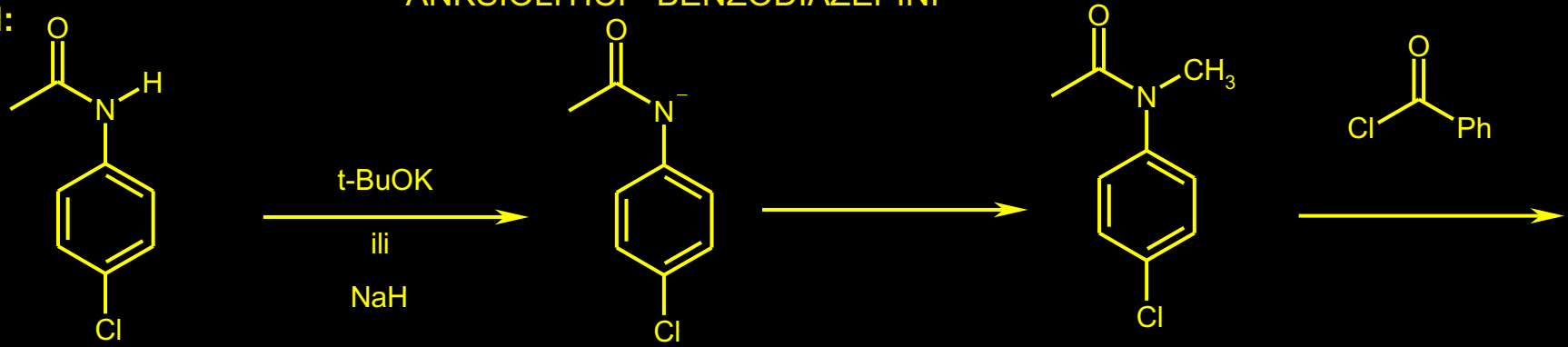
ANSIOLITICI - BENZODIAZEPINI

DIAZEPAM:



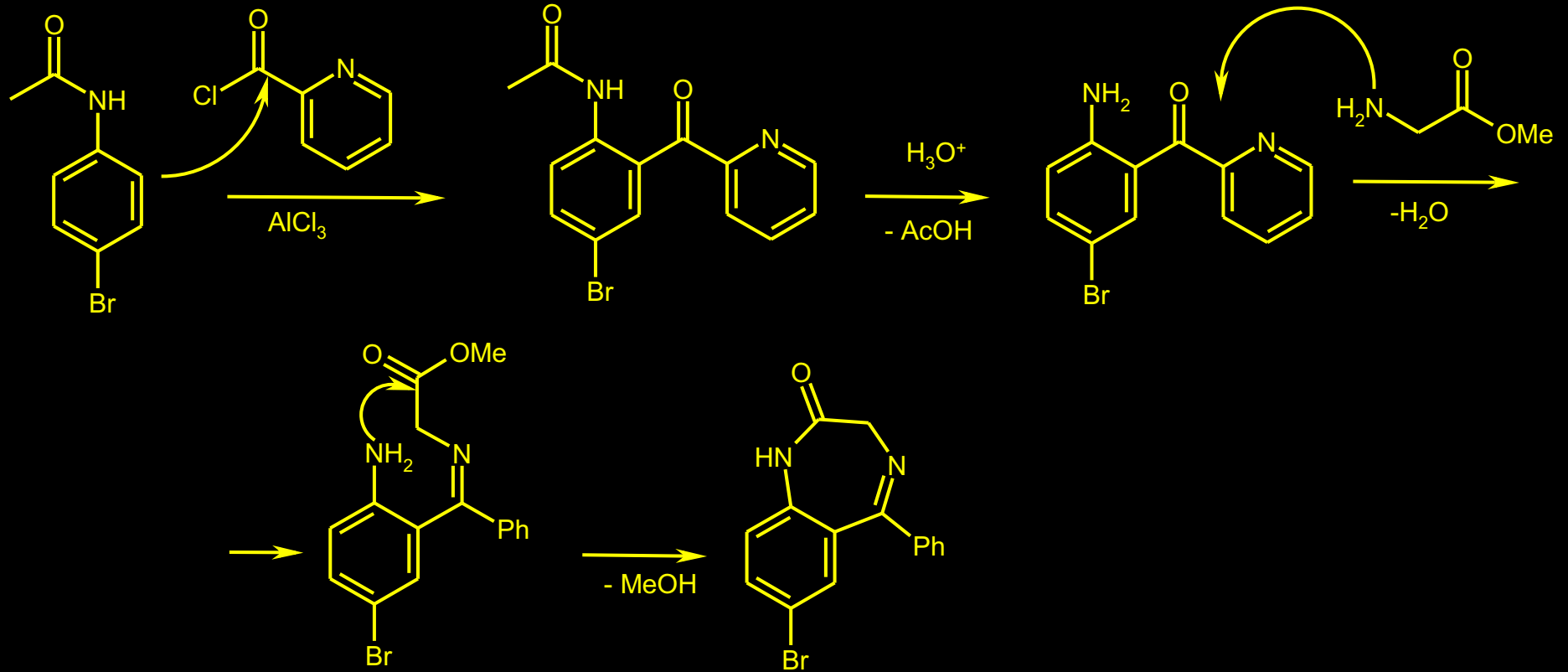
ANSIOLITICI - BENZODIAZEPINI

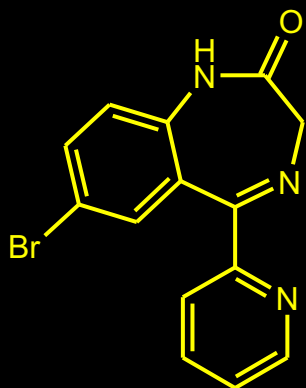
DIAZEPAM:



ANSIOLITICI - BENZODIAZEPINI

BROMAZEPAM





Monograph Number: 1369

Title: Bromazepam

CAS Registry Number: 1812-30-2

CAS Name: 7-Bromo-1,3-dihydro-5-(2-pyridinyl)-2H-1,4-benzodiazepin-2-one

Additional Names: 7-bromo-5-(2-pyridyl)-3H-1,4-benzodiazepin-2(1H)-one

Manufacturers' Codes: Ro-5-3350

Trademarks: Compendium (Polifarma); Creosedin (Osiris); Durazanyl (Durachemie); Lectopam (Roche); Lexomil (Roche); Lexotan (Roche); Lexotanil (Roche); Normoc (Merckle)

Molecular Formula: C₁₄H₁₀BrN₃O

Molecular Weight: 316.16.

Percent Composition: C 53.19%, H 3.19%, Br 25.27%, N 13.29%, O 5.06%

Literature References: Prepn: Berger et al., BE 619101; eidem, Fryer et al., US 3100770 (1962, 1963 to Hoffmann-La Roche); eidem, J. Pharm. Sci. 53, 264 (1964); US 3182065; US 3182067 (both 1965 to Hoffmann-La Roche). Pharmacology: Korol, Brown, Pharmacology 1, 115 (1968). Metabolism: M. A. Schwartz et al., J. Pharm. Sci. 62, 1776 (1973); Drug Metab. Dispos. 2, 31 (1974). Evaluation as pre-anesthesia medication: P. Chalmers, J. N. Horton, Anesthesia 39, 370 (1984). Multicenter clinical comparison with lorazepam, q.v.: G. J. Cordingley et al., Curr. Med. Res. Opin. 9, 505 (1985). Evaluation of adverse effects and withdrawal reactions: R. Fontaine et al., Psychopharmacol. Bull. 21, 91 (1985). Toxicity: E. I. Goldenthal, Toxicol. Appl. Pharmacol. 18, 185 (1971). Comprehensive description: M. M. Hassan, M. A. Abounassif, Anal. Profiles Drug Subs. 16, 1-51 (1987).

Properties: Colorless prisms from acetone, mp 237-238.5° (dec). LD₅₀ orally in rats: 3050 ±405 mg/kg (Goldenthal).

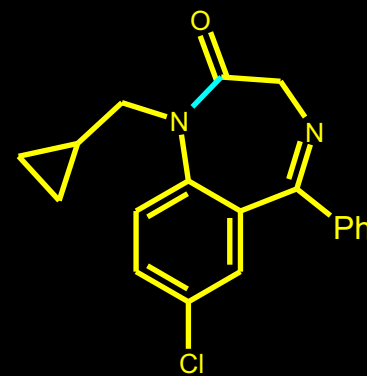
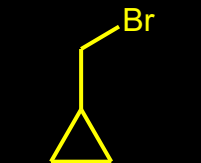
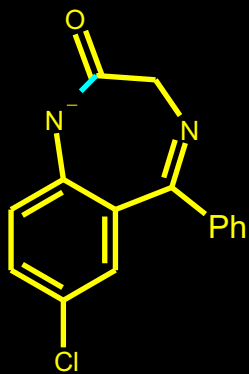
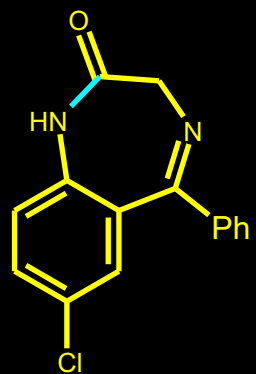
Melting point: mp 237-238.5° (dec)

Toxicity data: LD₅₀ orally in rats: 3050 ±405 mg/kg (Goldenthal)

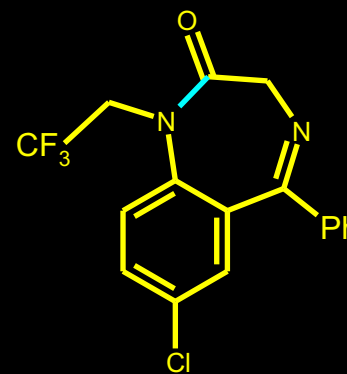
NOTE: This is a controlled substance (depressant): 21 CFR, 1308.14.

Therap-Cat: [Anxiolytic](#).

ANKSIOLITICI - BENZODIAZEPINI



Prazepam



Halazepam: Halazepam,

ANSIOLITICI - BENZODIAZEPINI

Monograph Number: 2429

Title: **CLORAZEPIC ACID**

CAS Registry Number: 23887-31-2

CAS Name: 7-Chloro-2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepine-3-carboxylic acid

Molecular Formula: C₁₆H₁₁ClN₂O₃

Molecular Weight: 314.73.

Percent Composition: C 61.06%, H 3.52%, Cl 11.26%, N 8.90%, O 15.25%

Literature References: Prepn: NL 6507637; J. Schmitt, US 3516988; reissued as US RE 28315 (1965, 1970, 1975 all to Clin-Byla). Synthesis and activity of the dipotassium salt: J. Schmitt et al., Chim. Ther. 4, 239 (1969). Solution chemistry: R. Raveux, M. Briot, *ibid.* 303. Metabolism: P. Gros, R. Raveux, *ibid.* 312. Toxicity data: M. Brunaud et al., Arzneimittel-Forsch. 20, 123 (1970). Series of articles on pharmacology and clinical use: *ibid.*, 123-137. HPLC determ in plasma: P. Colin, G. Sirois, J. Chromatog. 273, 367 (1983). Clinical trial in anxiety: W. W. K. Zung, J. Clin Psychiatry 48, 13 (1987); in comparison with buspirone, q.v.: K. Rickels et al., Arch. Gen. Psychiatry 45, 444 (1988). Comprehensive description: J. A. Raihle, V. E. Papendick, Anal. Profiles Drug Subs. 4, 91-112 (1975).

Derivative Type: Dipotassium salt

CAS Registry Number: 57109-90-7

CAS Name: 7-Chloro-2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepine-3-carboxylic acid monopotassium salt compd with potassium hydroxide

Additional Names: clorazepate dipotassium

Manufacturers' Codes: Abbott 35616; CB-4306

Trademarks: Belseren (Bristol-Myers Squibb); Mendon (Dainippon); Tranxilène (Clin-Comar-Byla); Tranxilium (Mack, Illert.); Transene (Clin-Comar-Byla); Tranxene (Abbott)

Molecular Formula: C₁₆H₁₀ClKN₂O₃.KOH

Molecular Weight: 408.92.

Percent Composition: C 47.00%, H 2.71%, Cl 8.67%, K 19.12%, N 6.85%, O 15.65%

Properties: White powder, freely sol in water. Very poorly sol in ethanol. Practically insol in ether, chloroform. Aq solns are alkaline to phenolphthalein. uv max (anhydrous product in water): 231, 311 nm (ϵ 33500, 2450). LD₅₀ in mice (mg/kg): 700 orally; 290 i.p. LD₅₀ orally in rats: >1000 mg/kg (Brunaud).

Absorption maximum: uv max (anhydrous product in water): 231, 311 nm (ϵ 33500, 2450)

Toxicity data: LD₅₀ in mice (mg/kg): 700 orally; 290 i.p.; LD₅₀ orally in rats: >1000 mg/kg (Brunaud)

Derivative Type: Monopotassium salt

CAS Registry Number: 5991-71-9

Manufacturers' Codes: CB-4311

Trademarks: Azene (Endo)

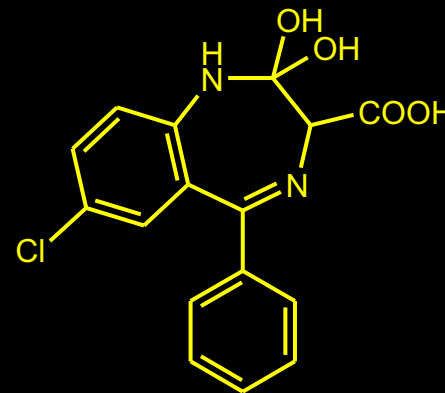
Molecular Formula: C₁₆H₁₀ClKN₂O₄

Molecular Weight: 368.82.

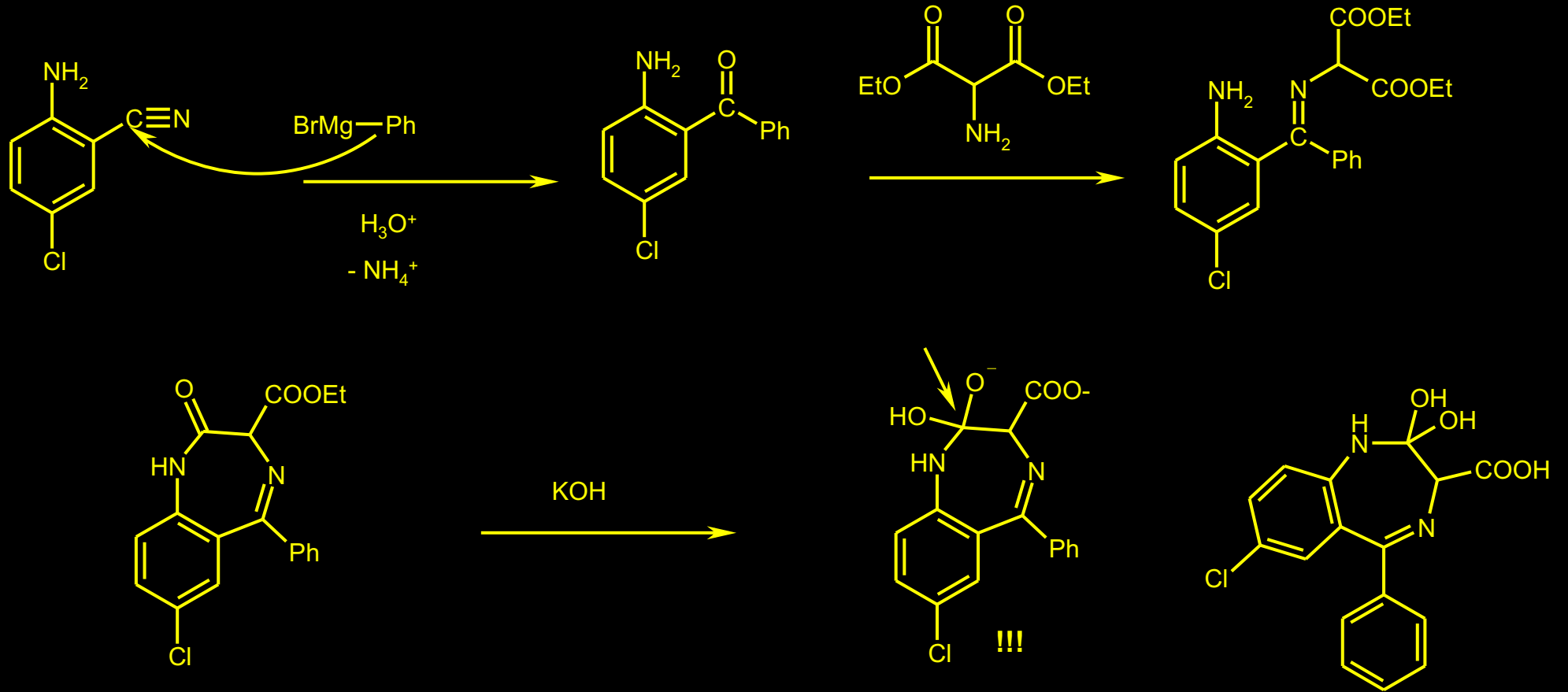
Percent Composition: C 52.11%, H 2.73%, Cl 9.61%, K 10.60%, N 7.60%, O 17.35%

NOTE: This is a controlled substance (depressant): 21 CFR, 1308.14.

Therap-Cat: Anxiolytic.



ANSIOLITICI - BENZODIAZEPINI



clorazepate dipotassium

ANSIOLITICI - BENZODIAZEPINI

Monograph Number: 310

Title: Alprazolam (Xanax [Pharmacia & Upjohn])

CAS Registry Number: 28981-97-7

CAS Name: 8-Chloro-1-methyl-6-phenyl-4*H*-[1,2,4]triazolo[4,3-*a*][1,4]benzodiazepine

Additional Names: 8-chloro-1-methyl-6-phenyl-4*H*-s-triazolo[4,3-*a*][1,4]benzodiazepine

Manufacturers' Codes: D-65MT; U-31889

Trademarks: Alplax (Gador); Cassadan (Arzneimittelwerk Dresden); Esparon (Orion); Tafil (Pharmacia & Upjohn); Tranquinal (Bago); Trankimazin (Pharmacia & Upjohn); Xanax (Pharmacia & Upjohn); Xanor (Pharmacia & Upjohn)

Molecular Formula: C₁₇H₁₃ClN₄

Molecular Weight: 308.77.

Percent Composition: C 66.13%, H 4.24%, Cl 11.48%, N 18.15%

Literature References: Prepn: J. B. Hester, **DE 2012190**; *idem*, **US 3987052** (1970, 1976 both to Upjohn); J. B. Hester *et al.*, *Tetrahedron Letters* **1971**, 1609; A. Walser, G. Zenchoff, *J. Med. Chem.* **20**, 1694 (1977). Central depressant activity: R. Nakajima *et al.*, *Japan. J. Pharmacol.* **21**, 497 (1971). Pharmacology: V. H. Sethy, *Arch. Pharmacol.* **301**, 157 (1978). Clinical studies: L. F. Fabre, *Curr. Ther. Res.* **19**, 661 (1976); J. B. Cohn, *J. Clin. Psychiat.* **42**, 347 (1981). Pharmacokinetics: D. R. Abernethy *et al.*, *ibid.* **44**, 45 (1983). Review of pharmacokinetics, clinical efficacy, and mechanism of action: J. A. Fawcett, H. M. Kravitz, *Pharmacotherapy* **2**, 242-254 (1982); of pharmacology and efficacy in anxiety and depression: *Drugs* **27**, 132 (1984).

Properties: Crystals from ethyl acetate, mp 228-228.5°. Sol in alc. Insol in water. uv max (ethanol): 222 nm (ε 40250). LD₅₀ in mice, rats (mg/kg): 1020, >2000 orally; 540, 610 i.p. (Nakajima).

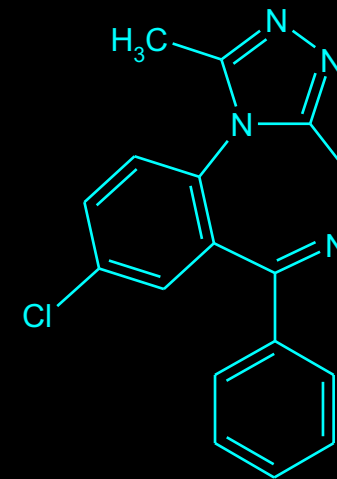
Melting point: mp 228-228.5°

Absorption maximum: uv max (ethanol): 222 nm (ε 40250)

Toxicity data: LD₅₀ in mice, rats (mg/kg): 1020, >2000 orally; 540, 610 i.p. (Nakajima)

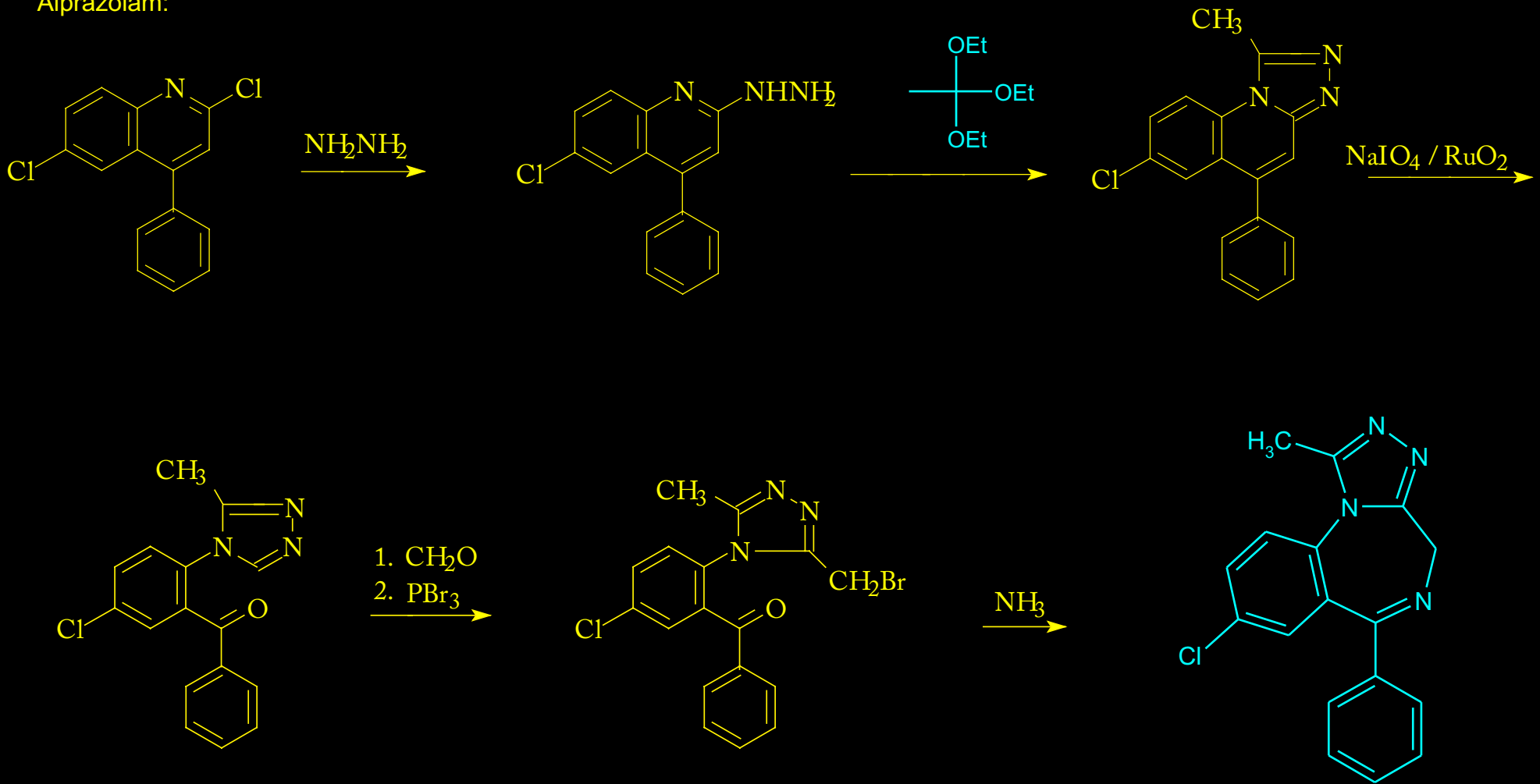
NOTE: This is a controlled substance (depressant): **21 CFR**, 1308.14.

Therap-Cat: Anxiolytic.



ANSIOLITICI - BENZODIAZEPINI

Alprazolam:



ANSIOLITICI - BENZODIAZEPINI

Monograph Number: 5810

Title: Medazepam

CAS Registry Number: 2898-12-6

CAS Name: 7-Chloro-2,3-dihydro-1-methyl-5-phenyl-1H-1,4-benzodiazepine

Trademarks: Ansilan (Lek); Diepin (Alcon); Medazepol (Farmasa); Megasedan (DIF); Narsis (Sumitomo); Nobrium (Roche); Psiquium (Sintofarma); Resmit (Shionogi); Rudotel (OPW); Tranquilax (Hokuriku)

Molecular Formula: C₁₆H₁₅ClN₂

Molecular Weight: 270.76.

Percent Composition: C 70.98%, H 5.58%, Cl 13.09%, N 10.35%

Literature References: Prepn: L. H. Sternbach *et al.*, *J. Org. Chem.* **28**, 2456 (1963); G. A. Archer *et al.*, **BE 620773 C.A.** **59**, 10095b (1963); E. Reeder, L. H. Sternbach, **US 3243427** (1963, 1966 both to Hoffmann-La Roche); S. Inaba *et al.*, *Chem. Pharm. Bull.* **20**, 1628 (1972); M. Mihalic *et al.*, *J. Heterocycl. Chem.* **14**, 941 (1977). Pharmacology: L. O. Randall *et al.*, *Arch. Int. Pharmacodyn. Ther.* **185**, 135 (1970). Crystal structure: G. Gilli *et al.*, *Acta Crystallogr.* **B34**, 3793 (1978).

Properties: Colorless prismatic crystals from ether + petr ether, mp 95-97°. LD₅₀ in mice (mg/kg): 360 i.p., 1070 orally (Randall).

Melting point: mp 95-97°

Toxicity data: LD₅₀ in mice (mg/kg): 360 i.p., 1070 orally (Randall)

Derivative Type: Hydrochloride

CAS Registry Number: 2898-11-5

Molecular Formula: C₁₆H₁₅ClN₂.HCl

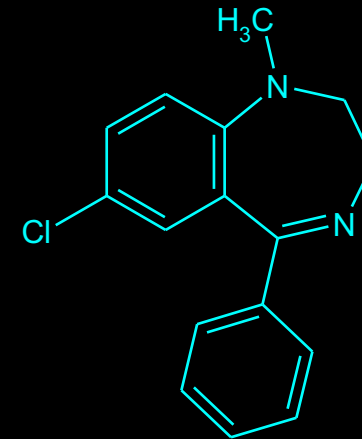
Molecular Weight: 307.22.

Percent Composition: C 62.55%, H 5.25%, Cl 23.08%, N 9.12%

Properties: Orange-red crystalline powder. Freely sol in water, alcohol.

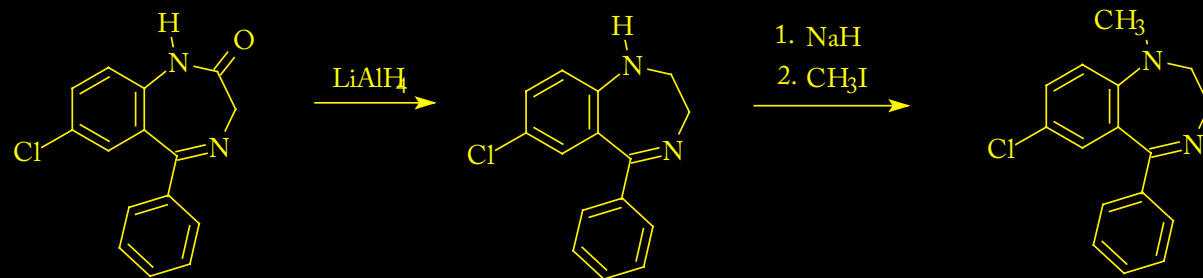
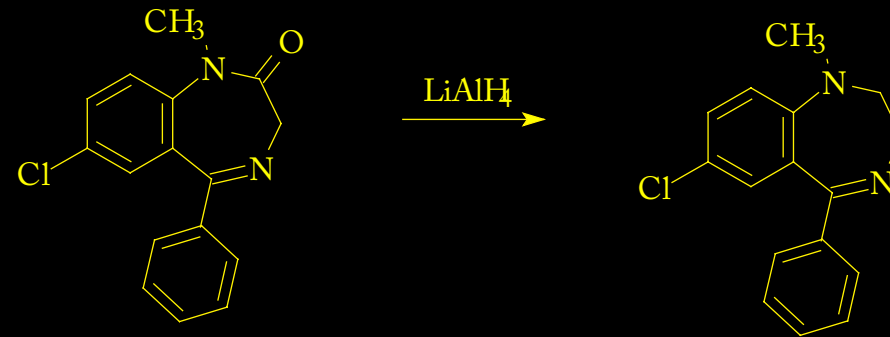
NOTE: This is a controlled substance (depressant): **21 CFR**, 1308.14.

Therap-Cat: Anxiolytic.



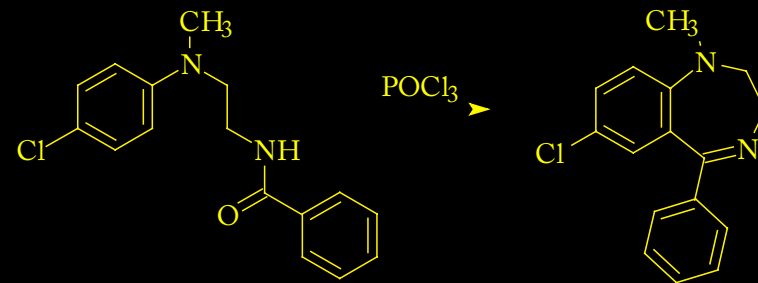
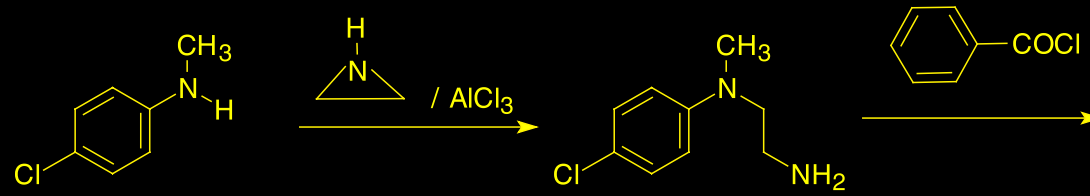
ANKSIOLITICI - BENZODIAZEPINI

Medazepam: (SINTEZA I)



ANSIOLITICI - BENZODIAZEPINI

Medazepam: (SINTEZA I)



ANKSIOLITICI KOJI NISU BENZODIAZEPINI

Monograph Number: 1492

Title: Buspirone

CAS Registry Number: 36505-84-7

CAS Name: 8-[4-[4-(2-Pyrimidinyl)-1-piperazinyl]butyl]-8-azaspiro[4.5]decane-7,9-dione

Molecular Formula: C₂₁H₃₁N₅O₂

Molecular Weight: 385.50.

Percent Composition: C 65.43%, H 8.11%, N 18.17%, O 8.30%

Literature References: Non-benzodiazepine anxiolytic; 5-hydroxytryptamine (5-HT₁) receptor agonist. Prepn: Y. H. Wu *et al.*, *J. Med. Chem.* **15**, 477 (1972); Y. H. Wu, J. W. Rayburn, **DE 2057845** (1971 to Bristol-Myers); *eidem*, **US 3717634** (1973 to Mead-Johnson). Pharmacology: L. E. Allen *et al.*, *Arzneimittel-Forsch.* **24**, 917 (1974). Comparison with diazepam in treatment of anxiety: H. L. Goldberg, R. J. Finnerty, *Am. J. Psychiatry* **136**, 1184 (1979); A. F. Jacobson *et al.*, *Pharmacotherapy* **5**, 290 (1985). Nonsynergistic effect with alcohol: T. Seppala *et al.*, *Clin. Pharmacol. Ther.* **32**, 201 (1982). Disposition and metabolism: S. Caccia *et al.*, *Xenobiotica* **13**, 147 (1983). Series of articles on chemistry, pharmacology, addictive potential, and clinical trials: *J. Clin. Psychiat.* **43**, pp 1-116 (1982); on pharmacology, safety and clinical comparison with clorazepate: *Am. J. Med.* **80**, Suppl. 3B, 1-51 (1986). Review of pharmacology and therapeutic efficacy: K. L. Goa, A. Ward, *Drugs* **32**, 114-129 (1986). *Review:* M. W. Jann, *Pharmacotherapy* **8**, 100-116 (1988); D. P. Taylor, *FASEB J.* **2**, 2445-2452 (1988).

Derivative Type: Hydrochloride

CAS Registry Number: 33386-08-2

Trademarks: Ansial (Vita); Ansiced (Abello); Axoren (Glaxo Wellcome); Bespar (Bristol-Myers Squibb); Buspar (Bristol-Myers Squibb); Buspimen (Menarini); Buspinol (Zdravlje); Buspisal (Lesvi); Narol (Almirall)

Molecular Formula: C₂₁H₃₁N₅O₂.HCl

Molecular Weight: 421.97.

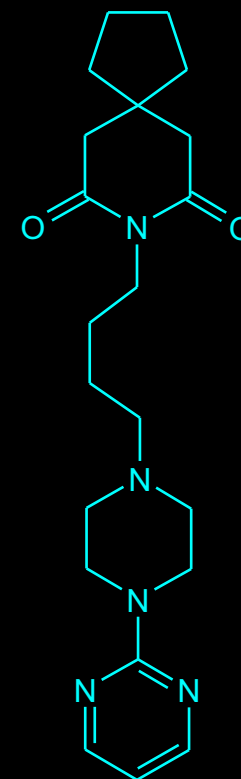
Percent Composition: C 59.77%, H 7.64%, N 16.60%, O 7.58%, Cl 8.40%

Properties: Crystals from abs ethanol, mp 201.5-202.5°. LD₅₀ i.p. in rats: 136 mg/kg (Allen).

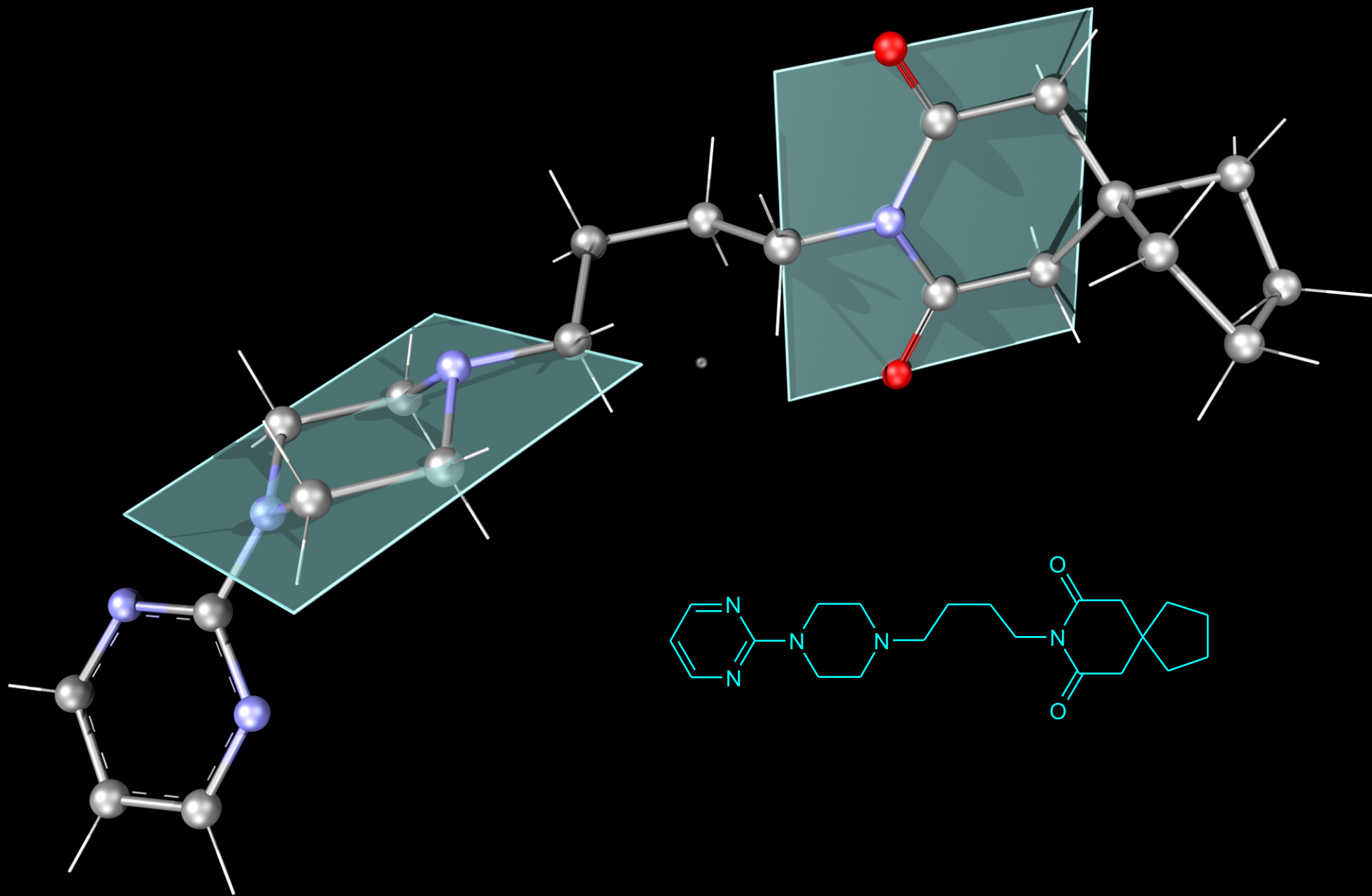
Melting point: mp 201.5-202.5°

Toxicity data: LD₅₀ i.p. in rats: 136 mg/kg (Allen)

Therap-Cat: Anxiolytic.



ANKSIOLITICI KOJI NISU BENZODIAZEPINI



ANKSIOLITICI KOJI NISU BENZODIAZEPINI

Buspirone:

