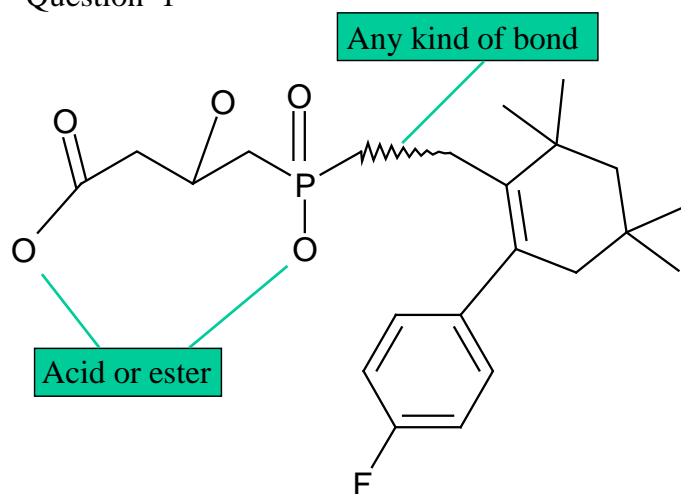


Question 1



**GR** (GRaph - skeleton input using: - to show connection | , to show new starting point | : to input a range of connections) Enter: node-node,node:node

**AT** (AToms - element symbols, Superatoms, shortcuts, G groups, X, #) Enter: label space node,node

**BO** (BOnds - SI, DO, TR, NO, SN, DN, X, Z; AC, CY, CX) Enter: label space node-node,node:node

**FS** (Free Sites - number of substitutions acceptable at a position) Enter: fsnumber space node,node

**TRA** (Translation Attributes - NT, BT, EQ, ANY) Enter: attribute space node,node

**CR** (Chain/Ring Attributes - LO, MID, HI, STR, BRA, MON, FU, SAT, UNS) Enter: attribute space node,node

**VP** (Variable Position)

NODE \_\_\_:  
?

Enter: node,node,node

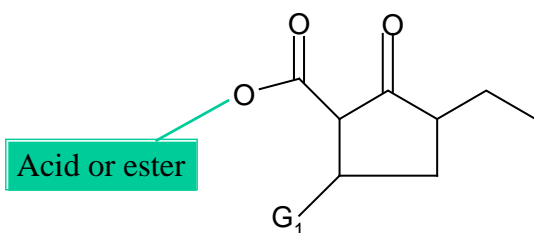
**AP** (Attachment Points)

(For G groups only)

ATT. : ATOM \_\_\_ OF GROUP NUMBER \_\_\_  
NO ATOMS ?

Enter: node,node,node

Question 2



$G_1 =$  H

OH

CN

NH<sub>2</sub>

NH-alkyl

N 
 / alkyl  
 \ alkyl

**GR** (GRaph - skeleton input using: - to show connection | , to show new starting point | : to input a range of connections) Enter: node-node,node:node

**AT** (AToms - element symbols, Superatoms, shortcuts, G groups, X, #) Enter: label space node,node

**BO** (BOnds - SI, DO, TR, NO, SN, DN, X, Z; AC, CY, CX) Enter: label space node-node,node:node

**FS** (Free Sites - number of substitutions acceptable at a position) Enter: fsnumber space node,node

**TRA** (Translation Attributes - NT, BT, EQ, ANY) Enter: attribute space node,node

**CR** (Chain/Ring Attributes - LO, MID, HI, STR, BRA, MON, FU, SAT, UNS) Enter: attribute space node,node

**VP** (Variable Position)

NODE \_\_\_:  
?

Enter: node,node,node

**AP** (Attachment Points)

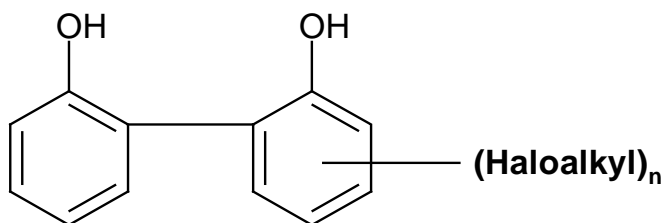
(For G groups only)

ATT. : ATOM \_\_\_ OF GROUP NUMBER \_\_\_

NO ATOMS ?

Enter: node,node,node

Question 3



One ring must be substituted by a monohaloalkyl and there can be up to four nodes substituted on the ring ( $n = 1-4$ ). No other substitution is permitted anywhere. (Clue: Keep in mind that CHK cannot be used with the variable point of attachment.)

**GR** (GRaph - skeleton input using: - to show connection | , to show new starting point | : to input a range of connections) Enter: node-node,node:node

**AT** (AToms - element symbols, Superatoms, shortcuts, G groups, X, #) Enter: label space node,node

**BO** (BOnds - SI, DO, TR, NO, SN, DN, X, Z; AC, CY, CX) Enter: label space node-node,node:node

**FS** (Free Sites - number of substitutions acceptable at a position) Enter: fnumber space node,node

**TRA** (Translation Attributes - NT, BT, EQ, ANY) Enter: attribute space node,node

**CR** (Chain/Ring Attributes - LO, MID, HI, STR, BRA, MON, FU, SAT, UNS) Enter: attribute space node,node

**VP** (Variable Position)

NODE \_\_\_:  
?

Enter: node,node,node

**AP** (Attachment Points)

(For G groups only)

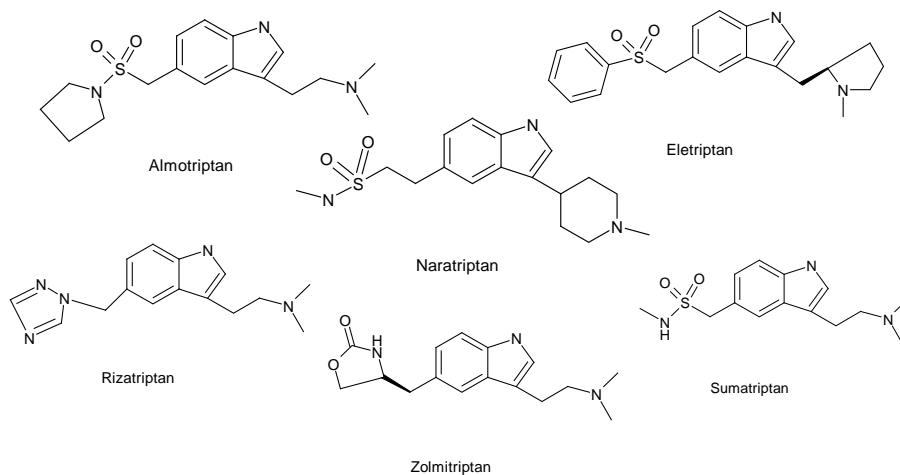
ATT. : ATOM \_\_\_ OF GROUP NUMBER \_\_\_

NO ATOMS ?

Enter: node,node,node

### Question 4

A series of compounds for treating migraine headaches from C & News



What other compounds with the basic structure of these compounds have been used to treat migraine?

**GR** (GRaph - skeleton input using: - to show connection | , to show new starting point | : to input a range of connections) Enter: node-node,node:node

**AT** (AToms - element symbols, Superatoms, shortcuts, G groups, X, #) Enter: label space node,node

**BO** (BOnds - SI, DO, TR, NO, SN, DN, X, Z; AC, CY, CX) Enter: label space node-node,node:node

**FS** (Free Sites - number of substitutions acceptable at a position) Enter: fnumber space node,node

**TRA** (Translation Attributes - NT, BT, EQ, ANY) Enter: attribute space node,node

**CR** (Chain/Ring Attributes - LO, MID, HI, STR, BRA, MON, FU, SAT, UNS) Enter: attribute space node,node

**VP** (Variable Position)

NODE \_\_\_\_:  
?

Enter: node,node,node

**AP** (Attachment Points)

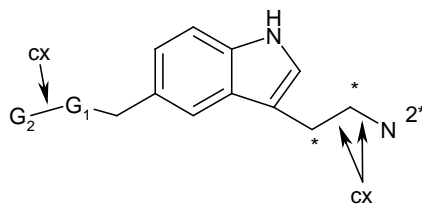
(For G groups only)

ATT. : ATOM \_\_\_\_ OF GROUP NUMBER \_\_\_\_

NO ATOMS ?

Enter: node,node,node

### Question 4 - Query



$G_1 = S^{2*}, N, C^{2*}$

$G_2 = N^{2*}, C^{2*}$

**GR** (GRaph - skeleton input using: - to show connection | , to show new starting point | : to input a range of connections) Enter: node-node,node:node

**AT** (AToms - element symbols, Superatoms, shortcuts, G groups, X, #) Enter: label space node,node

**BO** (BOnds - SI, DO, TR, NO, SN, DN, X, Z; AC, CY, CX) Enter: label space node-node,node:node

**FS** (Free Sites - number of substitutions acceptable at a position) Enter: fsnumber space node,node

**TRA** (Translation Attributes - NT, BT, EQ, ANY) Enter: attribute space node,node

**CR** (Chain/Ring Attributes - LO, MID, HI, STR, BRA, MON, FU, SAT, UNS) Enter: attribute space node,node

**VP** (Variable Position)

NODE \_\_\_:

?

Enter: node,node,node

**AP** (Attachment Points)

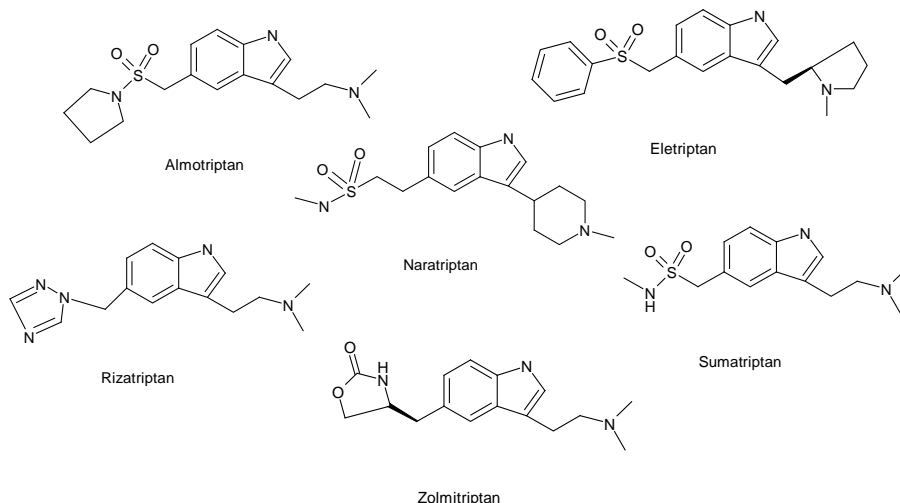
(For G groups only)

ATT. : ATOM \_\_\_ OF GROUP NUMBER \_\_\_

NO ATOMS ?

Enter: node,node,node

### Question 5



Have any compounds of this type have been used as treatment for afflictions other than migraine?

**GR** (GRaph - skeleton input using: - to show connection | , to show new starting point | : to input a range of connections) Enter: node-node,node:node

**AT** (AToms - element symbols, Superatoms, shortcuts, G groups, X, #) Enter: label space node,node

**BO** (BOnds - SI, DO, TR, NO, SN, DN, X, Z; AC, CY, CX) Enter: label space node-node,node:node

**FS** (Free Sites - number of substitutions acceptable at a position) Enter: fnumber space node,node

**TRA** (Translation Attributes - NT, BT, EQ, ANY) Enter: attribute space node,node

**CR** (Chain/Ring Attributes - LO, MID, HI, STR, BRA, MON, FU, SAT, UNS) Enter: attribute space node,node

**VP** (Variable Position)

NODE \_\_\_\_:  
?

Enter: node,node,node

**AP** (Attachment Points)

(For G groups only)

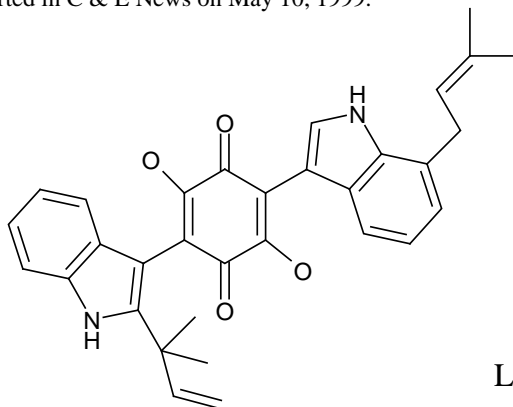
ATT. : ATOM \_\_\_\_ OF GROUP NUMBER \_\_\_\_

NO ATOMS ?

Enter: node,node,node

### Question 6

A compound with potential activity as an oral replacement for insulin was reported in C & E News on May 10, 1999.



L-783,281

Find any patents relating to this and similar compounds.

**GR** (GRaph - skeleton input using: - to show connection | , to show new starting point | : to input a range of connections) Enter: node-node,node:node

**AT** (AToms - element symbols, Superatoms, shortcuts, G groups, X, #) Enter: label space node,node

**BO** (BOnds - SI, DO, TR, NO, SN, DN, X, Z; AC, CY, CX) Enter: label space node-node,node:node

**FS** (Free Sites - number of substitutions acceptable at a position) Enter: fnumber space node,node

**TRA** (Translation Attributes - NT, BT, EQ, ANY) Enter: attribute space node,node

**CR** (Chain/Ring Attributes - LO, MID, HI, STR, BRA, MON, FU, SAT, UNS) Enter: attribute space node,node

**VP** (Variable Position)

NODE \_\_\_:  
?

Enter: node,node,node

**AP** (Attachment Points)

(For G groups only)

ATT. : ATOM \_\_\_ OF GROUP NUMBER \_\_\_

NO ATOMS ?

Enter: node,node,node