



DRUG INTERACTIONS with SMOKING



PHARMACOKINETIC DRUG INTERACTIONS with SMOKING

Drugs that may have a *decreased effect* due to induction of CYP1A2:

- Bendamustine
- Caffeine
- Clozapine
- Erlotinib
- Fluvoxamine
- Irinotecan (clearance increased and systemic exposure decreased, due to increased glucuronidation of its active metabolite)
- Olanzapine
- Ropinirole
- Tacrine
- Theophylline

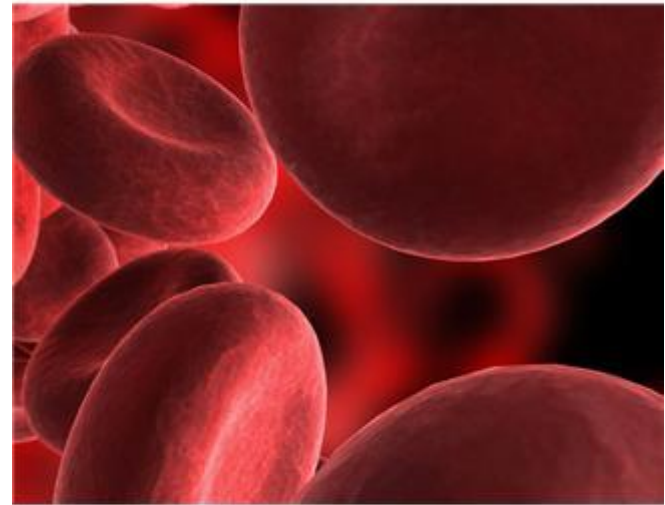
Smoking cessation will reverse these effects.



PHARMACOKINETIC DRUG INTERACTIONS with SMOKING, cont'd

Drug that might have an *increased effect* and efficacy due to induction of CYP1A2:

- Clopidogrel



Smoking cessation will reverse these effects.



PHARMACODYNAMIC DRUG INTERACTIONS with SMOKING

Smokers who use combined hormonal contraceptives have an increased risk of serious cardiovascular adverse effects:

- Stroke
- Myocardial infarction
- Thromboembolism



This interaction **does not** decrease the efficacy of hormonal contraceptives.

Women who are 35 years of age or older AND smoke at least 15 cigarettes per day are at significantly elevated risk.



DRUG INTERACTIONS with SMOKING: SUMMARY

Clinicians should be aware of their patients' smoking status:

- Clinically significant interactions result from the combustion products of tobacco smoke, not from nicotine.
- Constituents in tobacco smoke (e.g., polycyclic aromatic hydrocarbons; PAHs) may enhance the metabolism of other drugs, resulting in an altered pharmacologic response.
- Changes in smoking status might alter the clinical response to the treatment of a wide variety of conditions.
- Drug interactions with smoking should be considered when patients start smoking, quit smoking, or markedly alter their levels of smoking.