Materials and Methods The resident validated prescriptions every day, could consult medical files in the Neurology ward and attended medical clinical rounds twice weekly. When a problem was identified in a prescription, the resident discussed it directly with the physician. Every PI was collected using a validated record sheet (Conort *et al*, J Pharm Clin, 2004).
Results The resident made 95 interventions during the eighteen-week study period. The physician acceptance rate of these recommendations was 92%. The most commonly identified drug-related problems were: inappropriate administration (19%), non-indicated drug (17%) and under dosage (12%). Nervous system drugs (24%), alimentary tract and metabolism drugs (17%) and cardiovascular drugs (14%) were the most frequently involved.
Conclusions The regular presence of the pharmacy resident on the neurology ward enabled him to be well integrated and to become familiar with inpatient specificities in the neurology department. Collaborative working relationships between pharmacists and physicians are the key to success and to reducing the number of potentially inappropriate prescriptions. The high physician acceptance rate is a good indication of intervention relevance. Recurrent problems were identified during this study. Data on interventions were presented to the pharmacy and therapeutic committee.

No conflict of interest.

CPC-005 A STUDY TO EVALUATE USTEKINUMAB IN PATIENTS WITH MODERATE TO SEVERE PLAQUE PSORIASIS

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Background Ustekinumab is a monoclonal antibody that binds with specificity and affinity to the p40 subunit of cytokines IL-12 and IL-23.
Purpose To determine the short and long-term effectiveness of ustekinumab in patients with moderate to severe plaque psoriasis.

To determine the change from the baseline in the Dermatology Life Quality Index (DLQI).

To describe the safety profile of ustekinumab in clinical practise.
Materials and Methods We reviewed the medical records of 31 patients who had been prescribed ustekinumab between October 2009 and July 2012 in our hospital. We noted the PASI (Psoriasis area severity index) and DLQI scores before and during the treatment and the adverse events reported by patients in their cheque-ups.

Clinicians typically consider at least 75% improvement (PASI75) in the disease to be a clinically meaningful improvement indicative of success.
Results Data were unavailable in 3 patients.

42.4% (12) of patients were male and the median age was 44 years. The median baseline PASI score was 17.89 and the mean duration of psoriasis was 23.22 years.

15 patients (54%) completed a DLQI questionnaire. The median baseline DLQI score was 15.93 and the median DLQI score during the treatment was 1.26.
7 patients (25%) reported adverse events:

4 patients (14.4%) upper respiratory tract infection.
2 patients (7.2%) dyslipidaemia.
1 patient (3.6%) liver enzyme alteration.
1 patient (3.6%) basal–cell carcinoma.
1 patient (3.6%) generalised desquamative erythema.

There was only one adverse event that forced the suspension of treatment (generalised desquamative erythema).

Conclusions In our study, ustekinumab demonstrated a rapid onset of action and a high effectiveness, stable safety and a great improvement in the quality of life in patients with moderate to severe plaque psoriasis on up to 34 months of continuous therapy.

Abstract CPC-005 Table 1

	16 Weeks n = 28	6 Months n= 23	12 Months n= 17	18 Months n = 14	24 Months n = 13	30 Months n= 10
PASI75(%)	82.1	91.3	94.1	92.9	76.9	90
PASI90(%)	71.4	69.6	47.1	50	46.2	50

No conflict of interest.

CPC-006 ADEQUACY OF CRITERIA FOR STARTING NATALIZUMAB IN PATIENTS WITH MULTIPLE SCLEROSIS

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Background Natalizumab is a monoclonal antibody authorised as second-line treatment after failure with interferon beta or in rapidly evolving severe relapsing-remitting multiple sclerosis (RRMS). Due to its high cost and safety profile, the appropriate selection of patients who will benefit most is of paramount importance.
Purpose To evaluate the adequacy of criteria for starting treatment with natalizumab in patients with multiple sclerosis (MS) based on the protocol approved in a tertiary hospital.
Materials and Methods Observational, retrospective analysis of patients treated with natalizumab between 2008 and 2011. Study data were obtained from clinical records.
Results 31 patients were treated with natalizumab, 26 women (83.9%) and 5 men (16.1%). Mean age was 38.8 years (SD = 9.1). Mean time between diagnosis and natalizumab start was 7.8 years (SD = 5.9). 29 patients (93.5%) had RRMS, 1 secondary-progressive MS (SPMS) and the other an intermediate disease between RRMS and SPMS. The mean number of relapses before treatment started was 3.7 (SD = 1.5) and the mean score for the expanded disability status scale was 3.3 (range 1–6). 27 patients (87.1%) had previously been treated with immunomodulatory drugs (interferon beta). In 4 patients (12.9%) natalizumab was first line treatment. All were diagnosed with rapidly evolving severe RRMS with gadolinium-enhancing lesions in brain magnetic resonance imaging and more than 2 disabling relapses in the previous year. At the end of the study 22 patients continued treatment and 9 had finished. These latter patients were categorised in two groups: short treatment duration (4 patients, median 5 months) and long treatment duration (5 patients, median 24 months).
Conclusions In our population, adequacy of criteria for starting treatment with natalizumab is appropriate and the drug was used for the authorised indications in more than 90% of patients.

No conflict of interest.

CPC-007 ADHERENCE PROBLEMS IDENTIFIED BY MOTIVATIONAL INTERVIEWING AND MEDICINES REVIEW IN STROKE PATIENTS

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Background Poor adherence to secondary prevention medicines occurs frequently in patients suffering a stroke or Transient

Ischemic Attack (TIA). To improve the adherence of these patients, a complex individualised pharmacist intervention was designed and is being used in an ongoing study investigating the effect on medicines adherence and new stroke events. The present work is a subanalysis of this study.

Purpose To examine adherence-related issues in stroke/TIA patients identified by use of a complex pharmacist intervention including medicines review and motivational interviewing.

Materials and Methods The study is being performed at the Neurology Ward and the Emergency Ward, Odense University Hospital, where patients treated for TIA or acute ischemic stroke are randomised to a complex individualised pharmacist intervention or a control group. The pharmacist intervention consists of 3 components: 1) A medicines review focused on potential adherence-related problems followed by recommendations to the ward physicians 2) A motivational interviewing consultation where the content is based on issues raised by the patient 3) A follow-up telephone call one week after discharge with standardised adherence questions to uncover potential non-adherence.

Results Twenty-four patients received the pharmacist intervention. Among the topics covered, 7 potential adherence-related problems were identified. Four of the recommendations were accepted by the physicians, 2 were refused and there was no response to one. The issues most commonly addressed in the consultations were change of lifestyle (79%), medicines management (67%) and adverse reactions (58%). Other issues included effectiveness of the medicines (50%), adherence aids (42%) and information about the disease (8%). According to the standardised questions, one patient had adherence problems at the one-week follow-up phone call.

Conclusions A complex pharmacist intervention can be used to identify potential adherence-related problems in stroke patients.

No conflict of interest.

CPC-008 ADHERENCE, TOLERABILITY AND QUALITY OF LIFE ASSESSMENT IN PATIENTS TREATED WITH TELAPREVIR

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Background The addition of NS3/4 protease inhibitors to the standard of care treatment (SoCT) for genotype 1 hepatitis C (pegylated interferon and ribavirin) has increased the treatment response rate as well as the frequency and severity of adverse events (AEs). These may reduce the effectiveness or even cause the discontinuation of treatment.

Purpose To evaluate adherence, tolerability and quality of life (QoL) in triple treatment patients (TT) (telaprevir + SoCT) in comparison with SoCT patients.

Materials and Methods Observational, prospective study performed in a 780-bed teaching hospital from February to September 2012. Prescription of TT was based on National Spanish Health System recommendations. A printed questionnaire was offered to patients (SoCT or TT) when they started on treatment and was given back three months later. The Questionnaire consisted of three parts: SMAQ (Simplified Medicines Adherence Questionnaire), Side Effects Profile Test (SEPT) (score from 1 to 5) and QoL Spanish version of the Chronic Liver Disease Questionnaire-Hepatitis C Virus (CLDQ-HCV) (score from 1 to 28). Statistical analyses were performed using SPSS 15.0 (non-parametric test).

Results A total of 53 hepatitis C patients started drug treatment during the study (26 TT vs. 27 SoCT). We obtained 12 questionnaires on TT (46.1% response rate, median age 52.4 years, 65.5% women) and 10 questionnaires of SoCT (37.0% response rate, median age 49.3 years, 58.1% women). Only 2 TT (16.6%) were non-adherent and 5 SoCT (50.0%) ($p = 0.002$). Data collected from SEPT showed a mean global score value of 2.2 in TT and 2.3 in SoCT ($p = 0.356$). The CLDQ-HCV mean global score was 15.9 in TT and 14.2 in SoCT ($p = 0.128$).

Conclusions Better adherence in TT is probably due to patient expectations and highest motivation for the new drug. Perhaps, this also affects to similar groups rates in SEPT and CLDQ-HCV.

No conflict of interest.

CPC-009 ADMINISTRATION OF DABIGATRAN REMOVED FROM THE CAPSULE

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Background Dabigatran, an oral anticoagulant classified as a direct thrombin inhibitor, is used for the prevention of stroke and systemic embolism. However, it has limitations in its method of administration; dabigatran should not be removed from the capsule and administered through a tube because of its unstable bioavailability.

Purpose To report a case that required dabigatran to be administered through a tube after removal from the capsule.

Materials and Methods A 79-year-old Japanese male with normal hepatic and renal function was receiving warfarin for the prevention of systemic embolism due to atrial fibrillation. When he started S-1 treatment as an adjuvant treatment for gastric cancer, PT- and INR levels exceeded the scale. Because this elevation was thought to be due to the interaction between warfarin and S-1, warfarin was replaced with dabigatran. After switching anticoagulants, PT-INR and aPTT stabilised. Subsequently, however, the patient fell and experienced paralysis due to medullary damage. We tried to administer dabigatran through a tube after removal from the capsule while carefully monitoring the blood levels. Although the typical daily dose of dabigatran is 220 mg, the daily dose in the present case was set to 150 mg in consideration of elevated blood concentration due to removal from the capsule. The dabigatran concentration 4 h after the first administration (peak) and before the second and third doses (trough) was measured by ultra-performance liquid chromatography/mass spectrometry.

Results The dabigatran concentration was 115.8, 62.45, and 80.05 ng/mL 4 h after the first administration and before the second and third doses, respectively, which is similar to data obtained in a clinical study using healthy Japanese volunteers. aPTT was 38–48 s.

Conclusions We were able to administer dabigatran after removal from the capsule through a tube at two-thirds the regular dose and maintain a similar dabigatran blood concentration to that obtained in a clinical study through careful monitoring of dabigatran plasma levels.

No conflict of interest.

CPC-010 ADVERSE EFFECTS AND EFFICACY OF ATROPINE 0.3% EYE DROPS IN PREMATURE INFANTS UNDERGOING SYSTEMATIC SCREENING FOR RETINOPATHY: AN OBSERVATIONAL STUDY

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