In adults, plasma viral RNA load and CD4 cell counts are established as markers of prognosis in HIV infection. Now US researchers have provided data about children (Journal of the American Medical Association 1998;279:756-61). In children admitted to a trial of treatment with nucleoside reverse transcriptase inhibitors, a baseline RNA load of less than 10 000 copies/ml and a satisfactory CD4 count (over 500 × 10^6/l) for children under 6.5 years, over 200 × 10^6/l over 6.5 years) were associated with a two year disease progression rate of less than 5%.

A multicentre North American study of 267 women who took a selective serotonin reuptake inhibitor (SSRI) antidepressant during pregnancy and 267 controls (Journal of the American Medical Association 1998;279:609-10) has shown no evidence that these drugs are teratogenic in therapeutic doses.

Many children with repaired heart defects are at continuing risk of infective endocarditis and prophylaxis remains important. In Oregon, USA follow up data were available for some 3400 children (Journal of the American Medical Association 1998;279:599-603). The highest risk was after repair of valvular aortic stenosis (13% over 25 years). Other 25 year risks were: coarctation of aorta 3.5%, ostium primum atrial septal defect 2.8%, isolated ventricular septal defect 2.7%, and tetralogy of Fallot 1.3%. Ten year follow up risks were: pulmonary atresia with ventricular septal defect 6.4%, pulmonary atresia without ventricular septal defect 5.3%, and complete atroventricular septal defect 1.1%. There was no postsurgical infective endocarditis in children treated for ostium secundum atrial septum defect, patent ductus arteriosus, or pulmonary stenosis.

Predisposing factors for methicillin resistant Staphylococcus aureus (MRSA) infection in children are similar to those in adults: prolonged hospital stay, invasive procedures, indwelling catheters, endotracheal incubation, and long or repeated courses of antibiotics. At a children's teaching hospital in Chicago, USA (Journal of the American Medical Association 1998;279:593-8) there has been an increase in community acquired MRSA in children without known risk factors—from 10 per 100 000 admissions in 1988-90 to 259 per 100 000 admissions in 1993-95. The organisms seemed more virulent but resistant to fewer antibiotics than those isolated from children with identified risk factors. An editorialist (Ibid: 623-4) questions whether some of the MRSA infections thought to have been community acquired might have been hospital acquired a long time before the recent admission and advises β lactam antibiotic treatment for suspected community acquired staphylococcal infection.

At St Jude Children's Research Hospital in Memphis, Tennessee, USA 182 children with newly diagnosed acute lymphoblastic leukaemia were given post-remission treatment including high dose methotrexate, teniposide, and cytarabine (New England Journal of Medicine 1998;338:499-505). They were randomised to conventional dosage or dosage based on the measured clearance of the three drugs. In those with B lineage leukaemia, but not in those with T lineage leukaemia, the children given individually tailored dosage did better (continuous complete remission at five years 76% v 66%). Plasma drug measure-

ment and consequent dose adjustment seemed helpful in the case of methotrexate but not for the other two drugs.

A large north American randomised placebo controlled trial (New England Journal of Medicine 1998;338:493-8) has failed to confirm that adding antenatal thyrotropin releasing hormone to antenatal steroid treatment in premature labour improves the outlook for the newborn. For 769 infants born at or before 32 weeks the results (treatment vs placebo) were: respiratory distress syndrome 66% v 65%, neonatal death 11% v 11%, chronic lung disease or neonatal death 45% v 42%, and death by 36 weeks gestational age 32% v 34%. The severity of lung disease was not affected by pretreatment with thyrotropin releasing hormone.

The increased occurrence in Finland of diseases such as congenital nephrosis, aspartyl glucosaminuria, and infantile onset spinocerebellar ataxia, which are rare elsewhere, has been put down to the isolation of groups of population. In the case of infantile onset spinocerebellar ataxia there is evidence that all cases have arisen from a single mutation that happened some 30 or 40 generations ago. Now another disease, apparently previously undescribed, has been added to the list (Lancet 1998;351:490-3). Seventeen infants are described from 12 families and the main features were: autosomal recessive inheritance, very small for dates babies (about 1700 g at 38 weeks (SD = 3.8)), early neonatal lactic acidosis, generalised aminoaciduria, iron overload (hepatic haemosiderosis, high serum ferritin, low transferrin, and high transferrin saturation), failure to thrive, and death in infancy (all before 4 months, nine in the first 2 weeks). The fundamental metabolic defect remains uncertain and there seems as yet to be no concise name for the syndrome.

Polymer chain reaction (PCR) amplification of chromosome 21 markers in amniotic fluid gives quick and accurate results in the prenatal diagnosis of Down's syndrome. Researchers in Birmingham (Lancet 1998;352:9-12) analysed over 2000 samples and non-blood stained specimens gave 99.6% informative results with no false-positives or false-negatives. The results can be available within 24 hours.

It looks as if those who have scoffed at dyslexia declaring it to be a non-disease have had their day. Work in Oxford (Lancet 1998;351:1849–52) using magnetic resonance spectroscopy has added to accumulating evidence of brain abnormality. In studying 14 adult men with dyslexia and 15 controls it was found that those with dyslexia had a reduced ratio of choline compounds to N-acetylaspartate in the left temporoparietal region and in the right cerebellar hemisphere. The changes are thought to be reflective abnormalities of cell density in these functionally connected brain areas.

The first published trial of zinc for children and adolescents with colds (Journal of the American Medical Association 1998;279:1962–7) has given negative results. Zinc gluconate glycerine lozenges did not reduce the duration of cold symptoms in Cleveland, Ohio schoolchildren but did give rise to a lot of minor side effects.