I have the following financial relationships with the manufacturer(s) of any commercial product(s) and/or provider of commercial services discussed in this CME activity.

:Investigator- Novartis

I do intend to discuss an unapproved/investigative use of a commercial product/device in my presentation.
HAND-FOOT-AND-MOUTH DISEASE

- HFMD
- Usually occurs in children less than 10 years of age
- Fever
HFMD

- Classically Coxsackie virus A16
- Human Enterovirus 71
- Coxsackie virus A10, or A5
- Other Coxsackie viruses
- Typically incubation is 3-6 days

HFMD - exanthem

- Vesicular eruption
- Lesions often on lateral fingers and toes-with an elliptical shape
- Erythematous surround
- May be particularly localized to areas of inflammation
HFMD - enanthem

- Vesicles in the oral cavity rupture to become ulcers
- Most commonly on the lateral aspects of the tongue
HFMD - treatment

- Encourage fluid intake
- Fever control
- Analgesics
VARICELLA

- *Varicella-Zoster* virus
- Prodrome of fever, headache and malaise
- Highly contagious
- Incubation 10-21 day range
VARICELLA - exanthem

- Tear drop shaped vesicles on an erythematous base
- “Dew-drop on a rose petal”
- The lesions spread from the trunk to the extremities
- Lesions progress to pustules and later crusted lesions
VARICELLA - enanthem

- Vesicular lesions occur which may become pustular
- Vesicles which rupture may become ulcers
VARICELLA - treatment

- Monitor fluid intake
- Reduce fever
- Antihistamines
- Antivirals especially if immunocompromised
- Role of vaccine to prevent disease

SCARLET FEVER

- *Streptococcus pyogenes*
- Erythrogenic toxin
- Pharyngitis and eruption
- Fever
- Incubation 2-5 days
SCARLET FEVER - exanthem

- Erythema accentuated in fold areas
- Pastia’s sign
- “Sand-paper” type eruption
- Desquamation
SCARLET FEVER - eanthem

- Erythematous oropharynx
- Exudates
- (Cervical lymphadenopathy)
- Petechiae of soft palate
- Strawberry tongue
SCARLET FEVER - treatment

- Monitor fluid intake
- Reduce fever
- Analgesics
- Penicillin
- Clindamycin
- Erythromycin
UNILATERAL LATEROTHORACIC EXANTHEM

- Unilateral laterothoracic exanthem
- A.K.A. Asymmetrical periflexural exanthem of childhood
- Described in 1962
- Usually in children, reports in adults are rare
UNILATERAL LATEROTHORACIC EXANTHEM

- Eczematous papules of unilateral axilla and flank
- Then spread to other areas of body
- Unusual viral exanthem-reported associated with parvovirus B19 and Epstein Barr virus along with others
UNILATERAL LATEROTHORACIC EXANTHEM

- Topical corticosteroids for inflammation
- Antipruritics for itching
REFERENCES

GIANOTTI-CROSTI SYNDROME

- Associated with viral illness
- Virus-associated exanthem
- Most often in children aged 2-6 years of age
- Generalized lymphadenopathy may be seen
- Infrequently pruritic
- May last 6-8 weeks
GIANOTTI-CROSTI SYNDROME

- Clinical findings:
  - Papular lesions
  - Urticarial lesions
  - Less often, vesicular or papulovesicular
  - More concentrated on the arms and legs
  - Can be seen on the trunk, but less dense
  - Koebner phenomenon
GIANOTTI-CROSTI SYNDROME

- Viruses associated with Gianotti-Crosti
  - Epstein-Barr
  - Hepatitis A, C
  - Cytomegalovirus
  - Human herpesvirus 6
  - Coxsackievirus A16, B4, B5
  - Rotavirus
  - Parvovirus B19
GIANOTTI-CROSTI SYNDROME

- Viruses associated with Gianotti-Crosti syndrome-continued
  - RSV
  - Echovirus
  - Enterovirus
  - Rubella and Mumps virus
  - Parainfluenza virus
  - HIV
GIANOTTI-CROSTI SYNDROME

- Bacteria associated with Gianotti-Crosti syndrome
  - Bartonella henselae
  - Beta-hemolytic streptococci
  - Borrelia Burgdorferi
  - Mycoplasma pneumoniae

- Gianotti-Crosti syndrome has been reported following some immunizations, however is not a contraindication to giving those immunizations
GIANOTTI-CROSTI SYNDROME

-Treatment

- Topical corticosteroids (one report of worsening- does not pose a contraindication)
- Oral antihistamines if patient has pruritus.

MEASLES (RUBEOLA)

- Caused by a paramyxovirus, an RNA virus
- Highly contagious prior to the use of the vaccine
- Uncommon with widespread use of the vaccine
- Prodrome of cough, coryza, conjunctivitis and Koplik’s spots
- Fever
- Incubation 10-14 days
MEASLES - exanthem

- A maculopapular eruption beginning at the scalp line->hairline->forehead->retroauricular->face, neck->then spreading downward
- Fades over a 72 hour period
- Brownish discoloration noted after fading
MEASLES - enanthem

- Koplik’s spots
  - white or bluish-gray specks
  - 1 mm in size
  - typically on buccal mucosa opposite lower molars
- May see erythematous papules on the palate
- Posterior pharynx often erythematous
MEASLES - treatment

- Monitor fluid intake
- Monitor respiratory status
- Reduce fever
- Vitamin A in children 6 months to 2 years and those who have an immunodeficiency

2006 Red Book. AAP Committee on Infectious Disease
INFECTIOUS MONONUCLEOSIS

- Epstein-Barr virus
- Prodrome of headache, malaise, fever and pharyngitis
- Incubation 33-49 days
- Exanthem occurs in 35% patients
- Accompanying Strep pharyngitis in 20-25%
INFECTIOUS MONONUCLEOSIS - exanthem

- Erythematous maculopapular lesions
- Initially on the trunk and then spreads
- Areas of confluence can occur
- Pruritus
- Fades in 3-4 days

INFECTIOUS MONONUCLEOSIS - enanthem

- Macules or petechiae of the palate
- Erythema of the oropharynx
- Findings of Strep pharyngitis when present
INFECTIOUS MONONUCLEOSIS - treatment

- Monitor fluid intake
- Reduce fever
- Analgesics
- If Strep pharyngitis is present, treat with appropriate antibiotics
ROCKY MOUNTAIN SPOTTED FEVER

- Caused by *Rickettsia rickettsii*
- Typically history of tick exposure
- Incubation 2-14 days
ROCKY MOUNTAIN SPOTTED FEVER

- Fever
- Severe headache
- Confusion
- Nausea and vomiting
- Photophobia
ROCKY MOUNTAIN SPOTTED FEVER - exanthem

- Exanthem present in 90% patients
- Erythematous macules and papules initially
- Later, petechial or purpuric lesions
- Lesions occur initially on the palms and soles, then spread centrally
Supportive therapy may be necessary
- Doxycycline
- Chloramphenicol