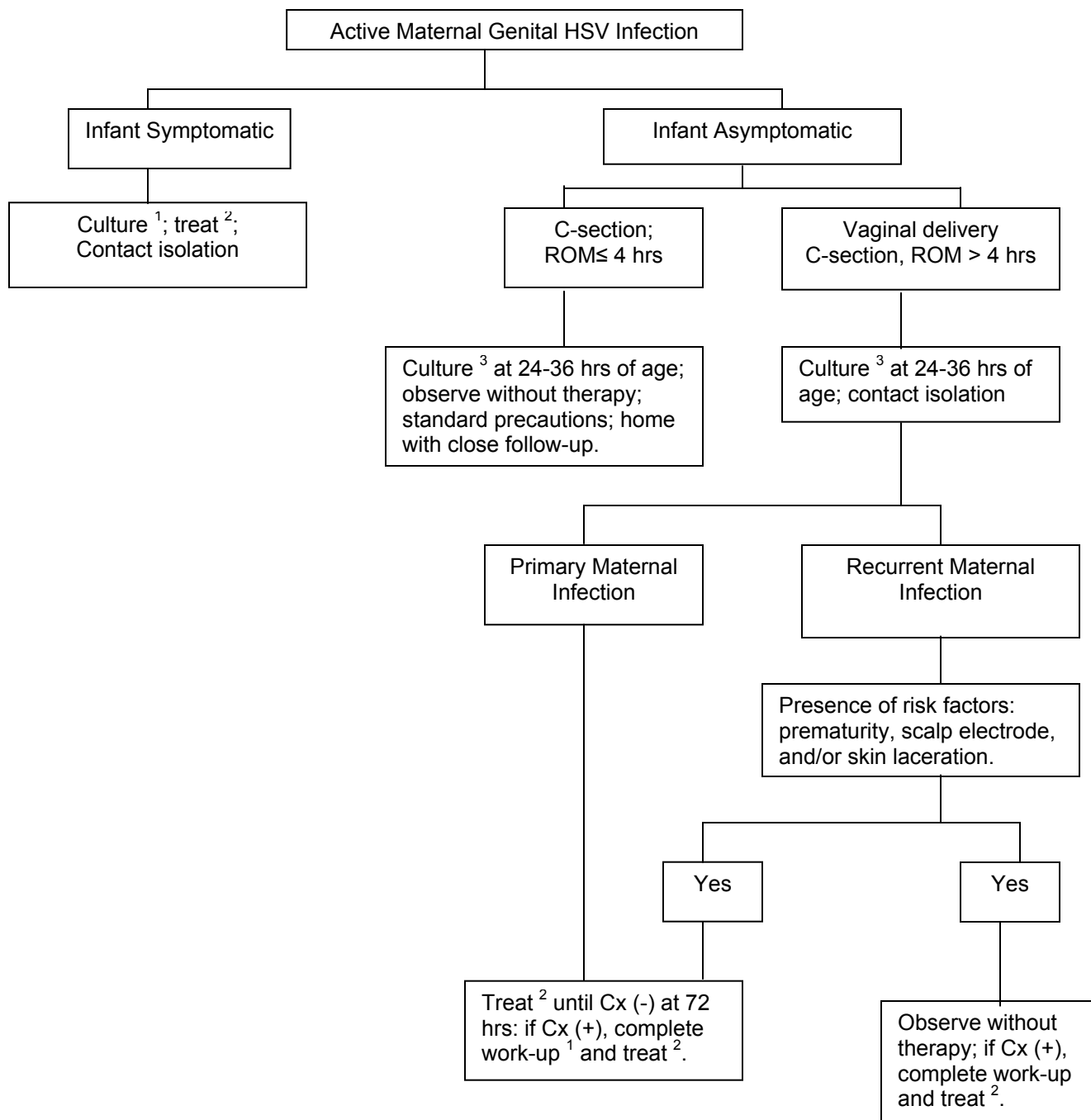


Infant	Toxoplasma panel (see text): Toxoplasma IgG, IgM/A/E. CSF PCR; (? Toxoplasma culture of blood/CSF)
Enterovirus Mother	Not necessary.
Infant	Cx: Throat/rectum/CSF/endotracheal aspirate; PCR: Blood, CSF
LCMV Mother	LCMV IgM and IgG; a negative LCMV IgG titer rules out the diagnosis (No infant work-up needed).
Infant	Serum LCMV IgM & IgG.
Parvovirus Mother	Parvovirus IgM/IgG; a negative IgG titer rules out the diagnosis (no infant work-up needed); PCR blood, amniotic fluid.
Infant	Serum IgM/IgG; Blood PCR.
Hepatitis B Mother	HBsAg: If negative, diagnosis is ruled out and no infant work-up needed.
Infant	Serum HBsAg (not umbilical cord) performed before hepatitis B vaccine given; Blood PCR.
<i>Chlamydia trachomatis</i> Mother	Not necessary.
Infant	Conjunctivitis: Rapid prep (e.g. DFA) of conjunctival scraping. Pneumonia: Culture (NOT rapid prep) of nasopharyngeal or endotracheal aspirate; ? Serum <i>Chlamydia</i> IgM.

FIGURE 1. Approach To the Evaluation and Management of Newborns Exposed at Delivery to Maternal HSV Infection

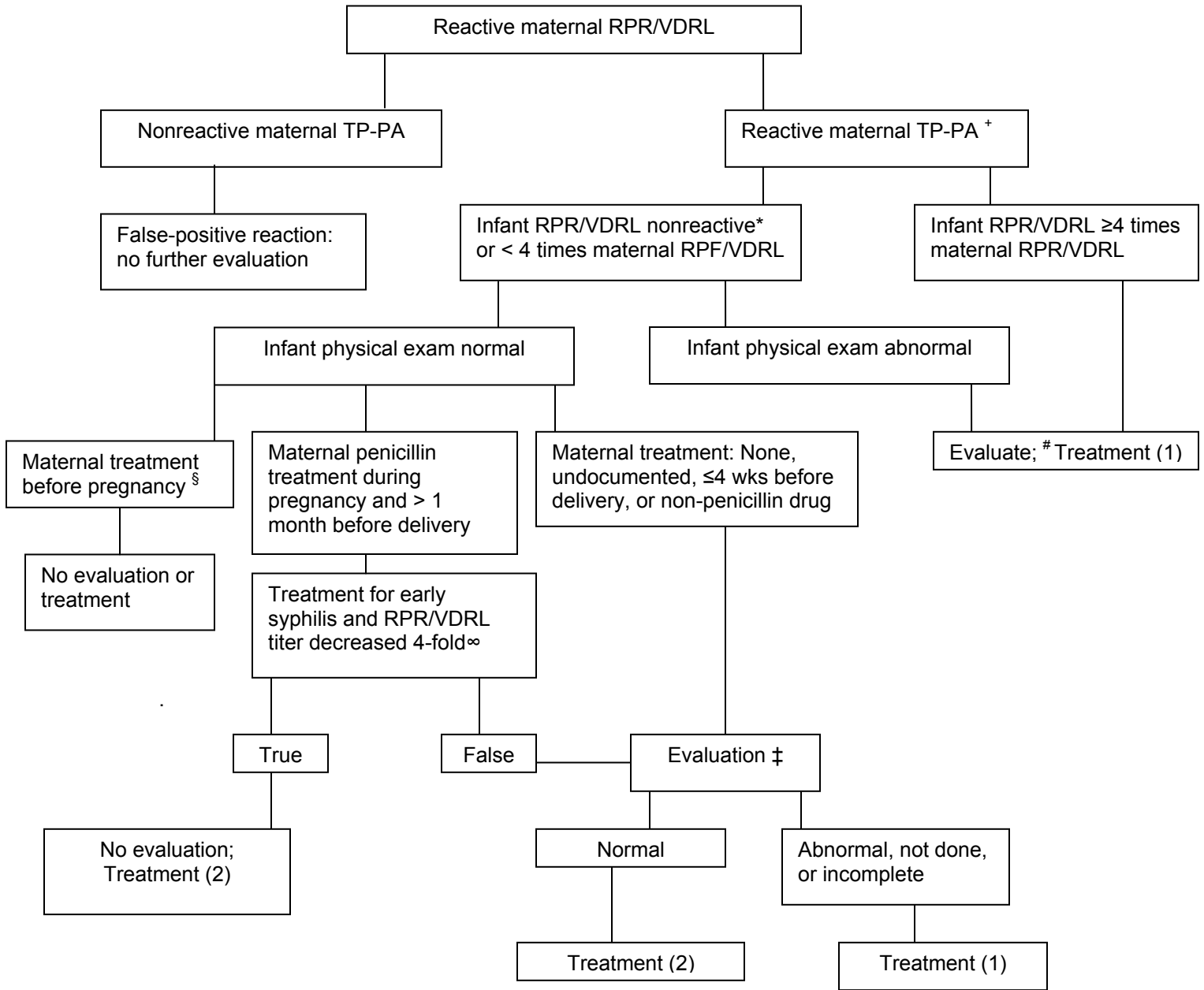


¹ Culture conjunctiva, mouth/throat, rectum, CSF, buffy coat, base of lesion (if present); send CSF for PCR; eye exam if conjunctival cx is positive; EEG/MRI/LFTs/CBC if HSV cx positive and as clinically indicated.

² Acyclovir (high dose: 20mg/kg/dose tid) per neonatal protocol; trifluridine ophthalmic solution 2 drops in each eye q 2-3 hrs. If HSV culture is (+), total duration of therapy should be discussed with ID consultant.

³ Culture conjunctiva, mouth/throat, rectum; if any, culture site is positive or infant develops clinical signs of possible HSV infection, complete culture work-up as in (1) above and treat².

FIGURE 2. Protocol for Evaluation and Treatment of Infants Born to Mothers with Reactive Serologic Tests for Syphilis



+ Test for HIV-antibody. Infant of HIV-AB positive mother does not require different evaluation of treatment.

* Infant's RPR may be nonreactive due to low maternal RPR titer or recent maternal infection. If the mother has untreated or inadequately treated syphilis and infant's physical exam is normal, treat infant with a single IM injection of benzathine penicillin (50,000 U/kg).

Evaluation consists of CBC, platelet count; CSF examination for cell count, protein, and quantitative VDRL; Long-bone films; cranial ultrasound; Auditory brainstem response (ABR). Other tests as clinically indicated (eye exam, chest X-ray, liver function tests; urine/meconium toxicology).

§ Women who maintain a VDRL titer ≤ 1:2 (RPR ≤ 1:4) beyond 1 year following successful treatment are considered serofast.

∞ Early syphilis: primary, secondary or early latent infection.

‡ CBC, platelet count; CSF examination for cell count, protein, and quantitative VDRL; Long bone films. If any abnormal, do eye exam, cranial ultrasound, ABR.

TREATMENT:

(1) Aqueous penicillin G 50,000 U/kg IV q 12 hr (≤1 wk or age). Q 8 hr (>1 wk), or procaine penicillin G 50,000 U/kg IM single daily dose x 10 days.

(2) Benzathine penicillin G 50,000 U/kg IM x 1 dose.

TABLE 3: Recommended Routine Hepatitis B Immunization Schedules

Maternal HBsAg Status	BW < 2000g	BW ≥ 2000g
Negative	<ol style="list-style-type: none"> 1. 30 days or dc (if < 30 days) 2. 2 months * 3. ≥ 4 months after #2 * 	<ol style="list-style-type: none"> 1. Birth 2. 1-2 mo. * 3. 6-18 mo. *
Positive	<ol style="list-style-type: none"> 1. Birth (also HBIG) 2. 1 month 3. 1 mo after 2nd dose * 4. 4 mo after 3rd dose * 	<ol style="list-style-type: none"> 1. Birth (also HBIG) 2. 1-2 mo. * 3. 6 mo. *
Unknown at Delivery	<ol style="list-style-type: none"> 1. Within 12 hr if status still unknown (also HBIG) 	<ol style="list-style-type: none"> 1. Birth (HBIG if positive)
Subsequent doses based on maternal HBsAg results.		

* If a combination vaccine is used (Pediatrix, Comvax), the 2nd dose is given at 2 mo, the 3rd is given at 4 mo, and a 4th dose is given at 6 mo (Pediatrix) or 15 mo (Comvax). The initial dose must be a single-antigen vaccine (Recombivax HB, 5 mcg or Engerix-B, 10 mcg), and a combination vaccine should not be given prior to 6 wks.

TABLE 4. Recommendations for Use of ZDV To Reduce Perinatal HIV Transmission

Screen all pregnant women early in pregnancy for HIV-antibody.

Maternal HIV-antibody positive:

- **Optimal Rx:** ZDV started at 14-34 wks of gestation, given intrapartum and administered to infant as soon as possible after birth.
- No prenatal care, but mother HIV-antibody positive and in labor: ZDV intrapartum and treat infant as soon as possible. *
- No prenatal care, no intrapartum ZDV: administer ZDV to infant as soon as possible; efficacy unknown.*
- If infant treatment cannot begin until beyond 24-48 hrs of age and the mother did not receive therapy during labor, no data support offering therapy to the infant (discuss with ARMS staff).

* Also consider nevirapine to infant.

TABLE 5. Evaluation and Management of Infants Born to HIV- Positive Mothers

1. No special isolation procedures required other than STANDARD PRECAUTIONS.
2. Bathe the infant as soon as possible after delivery and preferably before any intramuscular (IM) injection is administered. If this is not possible, then the site of the IM injection MUST be thoroughly cleansed with alcohol BEFORE the injection is administered.
3. Mother should not breastfeed.
4. Mothers who received zidovudine (ZDV) during pregnancy will receive a continuous infusion of ZDV during labor.
5. Their infants (≥ 34 weeks) should receive:
 - ZDV within 12 hrs which is continued for up to 6 wks as outpatients.
 - PO: 2 mg/kg q 6 hr
 - IV: 1.5 mg/kg q 6 hr (infused over 1/2 hr)

The dosage in preterm infants < 34 weeks of gestation may need modification in terms of longer interval between doses; this should be discussed with the ARMS team. The infants of mothers who did not receive ZDV during pregnancy/delivery will be managed as per Table 4. HIV PCR: see text and Table 6.
6. CBC, platelets. Urine for CMV Cx.
7. If MATERNAL HBsAg positive : HBIG + Vaccine per protocol. (For other immunizations, see Table 10)
8. If MATERNAL TOXOPLASMA IgG positive (any titer): Toxoplasma PANEL should be obtained on mother and infant.
9. If MATERNAL anti-HCV Ab positive: Follow-up at 12 mo with anti-HCV antibody test.
10. If MATERNAL RPR positive , follow syphilis protocol. In general, infants born to mothers co-infected with HIV and syphilis do not require different evaluation or treatment for syphilis. However, close serologic follow-up is mandatory. PAGE PABLO SANCHEZ (972-206-9021)
11. Assess mother's TB status (results of PPD) during pregnancy/at delivery, and inquire about possible TB contacts at home.
12. If infant is infected and remains in the nursery at 6 to 8 weeks of age, consult Pediatric ID regarding initiation of Bactrim prophylaxis against pneumocystis.
13. Contact ARMS Clinic/Mary Mallory at CMC BEFORE discharge so that appropriate follow-up can be arranged. Make appointment for ARMS clinic for 2 weeks after discharge or 2 weeks of age.

TABLE 6. Laboratory Monitoring and Immunization for the HIV-Exposed Infant (Birth to 6 Months of Age).*									
	Age								
	Birth	2 wk	4 wk	6 wk	2 mo	3 mo	4 mo	5 mo	6 mo
Assess risk of other maternal diseases: maternal toxoplasma IgG, RPR, Hepatitis C antibody, HBsAG	x								
Zidovudine	x	x	x	x					
CBC §	x		x		x	x	x		
CMV urine culture	x								
HIV PCR	x	x			x		x		
T-Cell profile¶			x			x			
Quantitative immunoglobulins							x		
Prophylaxis for PCP**				x					

§ CBC and differential leukocyte count should continue to be done monthly beyond 4 months of age in the infected child and the child whose infection status is unclear at 4 months.

Do not use cord blood. If positive, repeat PCR immediately to confirm infection. If initial test is negative, repeat test at 1 to 2 months. A third test is recommended at 2-4 months. If clinical status or other laboratory parameters suggest HIV infection, repeat testing earlier. If the tests are negative for infection, ongoing serologic follow-up is indicated.

¶ T-cell profile should be repeated at 6 months in infected children and in those whose infection status is unclear at 6 months.

** For infants ≥ 6 weeks of age discuss regimen for PCP prophylaxis with ID staff.

* Adapted from *Pediatrics* 1997;99:915.

TABLE 7. Guidelines For Preventive Measures After Exposure To Chickenpox In The Nursery/Maternal Ward

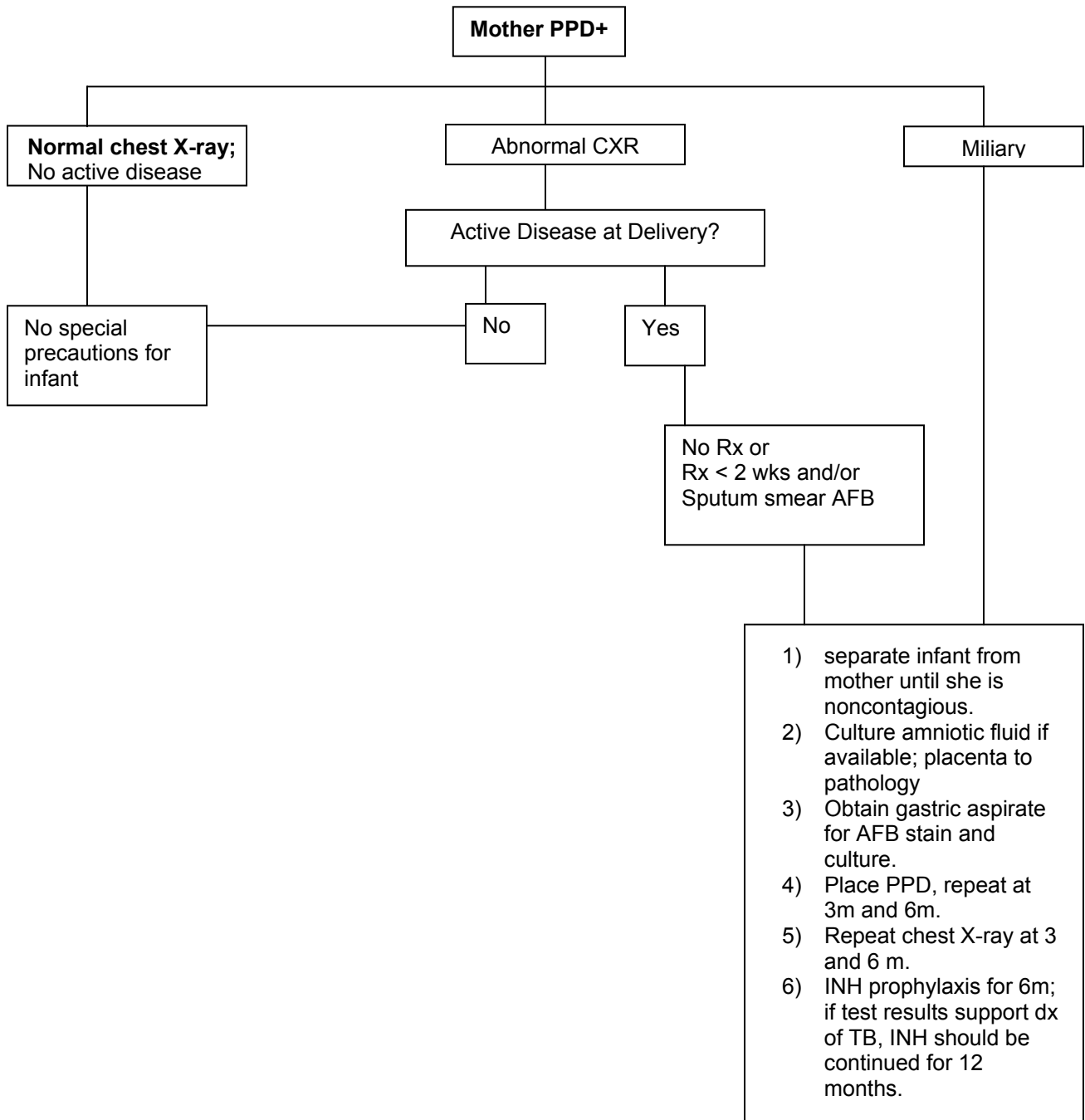
Type of Exposure or Disease	Chickenpox at Delivery		Disposition
	Mother	Neonate	
A. Siblings at home have active chickenpox when neonate and mother are ready for discharge from hospital	No	No	Infant can go home with mother. If the mother has no history of chickenpox ^a and infant is 7 days of age, the infant receives VariZIG before discharge. No VariZIG for mother.
B. Mother with no history of chickenpox ^a : exposed 6-20 days antepartum ^b	No	No	1) Mother & Infant: Isolate in negatively-vented isolation room; send home at earliest date. If mother develops chickenpox 1-2 days postpartum, infant should receive VariZIG. 2) Other Mothers & Infants; Hospital personnel: No special management unless nonimmune contact exposed to index patient within 48 hrs of developing chickenpox. If so, contact infection control.
C: Onset of maternal chickenpox antepartum (5 days before delivery) or postpartum (48 hours after delivery)	Yes	No	1) Infected mother: Isolate (negatively-vented isolation room) until no longer infectious. 2) Infant: administer VariZIG and isolate in room with mother (preferable) or in negatively-vented isolation room (CCN/ICN). 3) Exposed mothers: No treatment, should be informed of exposure. 4) Infants Exposed to Infected Mother: Administer VariZIG only if their mother is nonimmune. ^a 5) Infants exposed to ASX infant of mother with chickenpox: No precautions unless case infant develops chickenpox within 48 hrs after exposure. If so, administer VariZIG to those infants whose mothers are nonimmune. ^a 6) Hospital Personnel: No precautions if immune or have received varicella vaccine (2 doses). Nonimmune personnel should be excluded from patient contact from the eighth to 21st day after the exposure - contact infection control.
D. Onset of maternal chickenpox antepartum (6 days before delivery)	No	No	1) Mother: No isolation 2) Infant: Isolate in negatively-vented isolation room up to 16 days after onset of maternal rash. (Varicella in infants born to mothers with active varicella can develop between 1 and 16 days of life.) 3) Other mothers/infants/hospital personnel: Same as B-2
E. Congenital chickenpox	No	Yes	1) Infected infant and his mother: Same as D-1, D-2; No VZIG. 2) Other mothers & infants. Same as C-3, C-4. 3) Hospital personnel: same as C-6.

^a Test mother for immunity (varicella IgG) if possible (i.e. results can be known \leq 96 hrs after exposure).

^b Exposure < 6 days antepartum would make mother potentially infectious > 72 hours after delivery.

FIGURE 3. Evaluation of Infants Born to Mothers with a Positive PPD Test

a) ASYMPTOMATIC INFANT;



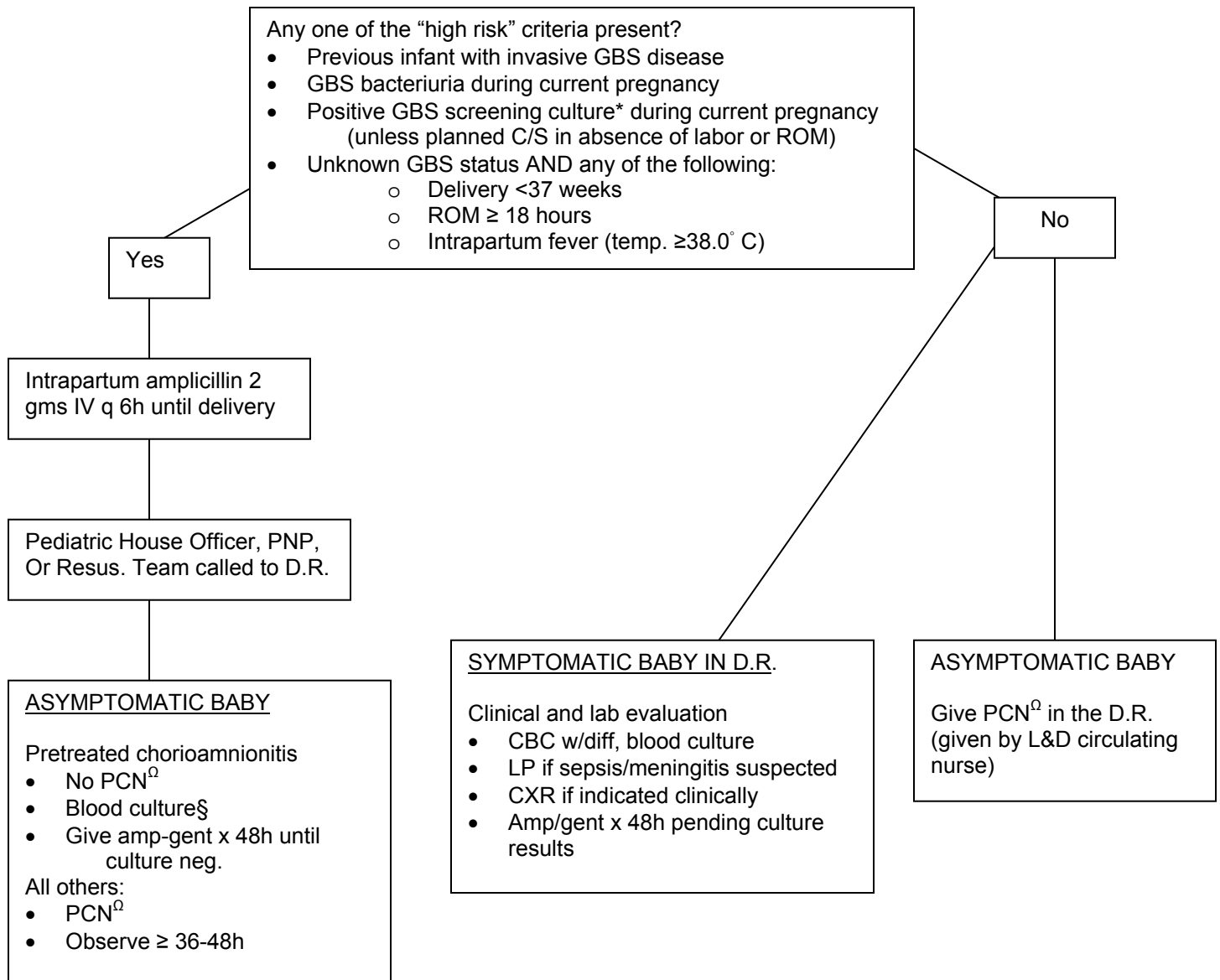
* Test for HIV-antibody; always assess household contacts for an unreconcognized case of contagious TB; consult Health Dept.

b) SYMPTOMATIC INFANT: Infectious Diseases MUST be consulted. This usually occurs in association with hematogenous dissemination of maternal TB such as in miliary tuberculosis. The infant evaluation includes placement of PPD, CXR, LP, AFB CX (gastric aspirate, ET aspirate, CSF). Multi-drug therapy with isoniazid, rifampin, pyrazinamide, and streptomycin or kanamycin must be initiated promptly per ID recommendations.

TABLE 8. Isolation Precautions in NBN/NICU	
Infection	Type of Precaution
Abscess <ul style="list-style-type: none"> • Contained by dressing • Draining, not contained by dressing 	Standard Contact
Conjunctivitis (Bacterial, Chlamydia, GC)	Standard
CMV	Standard
Enteroviruses (Coxsackie, echovirus)	Standard
Diarrhea	Contact
Fungal (Candidiasis, aspergillosis, malassezia)	Standard
Hepatitis Viruses (maternal exposure/disease) <ul style="list-style-type: none"> • A • Others 	Contact Standard
Herpes Simplex <ul style="list-style-type: none"> • Infected infant • Exposed infant (high risk) • Exposed infant (low risk) 	Contact Contact Standard
HIV	Standard
Listeriosis	Standard
Rubeola [(measles) maternal exposure/disease]	Airborne*
Malaria	Standard
Meningitis <ul style="list-style-type: none"> • <i>N. meningitides</i>, <i>H. influenzae</i> type b • All others (including GBS, <i>E. coli</i>) 	Droplet Standard
Multi-Drug Resistant Organisms (MRSA, VRE, Resistant gram negative bacilli)	Contact
NEC	Standard
Pertussis	Droplet
Respiratory Viruses (RSV, Parainfluenza, adenovirus)	Contact
Rubella (Congenital)	Contact
Syphilis	Standard
Toxoplasmosis	Standard
Varicella (disease, maternal exposure/disease)	Airborne, contact*
Tuberculosis <ul style="list-style-type: none"> • Mother • Infant (maternal exposure/disease) 	Airborne* Standard
Omphalitis	Standard

* Requires room with negative air-pressure ventilation. Adapted from Siegel JD. The Newborn Nursery.

FIGURE 4. PHS GBS Protocol: A Combined Obstetric/Pediatric Approach to Prevent Early-Onset GBS Disease



* Screening not done routinely at Parkland at present.

§ Blood culture

- If blood culture positive, perform LP for gram stain, culture, cell count, protein and glucose
 - If LP normal, treat 7-10 days (initially Amp/gent; then depends on isolate, sensitivity, etc.)
 - If LP abnormal, treat for minimum of 14-21 days depending on isolate and clinical course
- If blood culture is negative, and infant remains asymptomatic, treat 48 hours; in the presence of clinical symptoms, infant will require longer therapy and additional workup (see Figure 5).

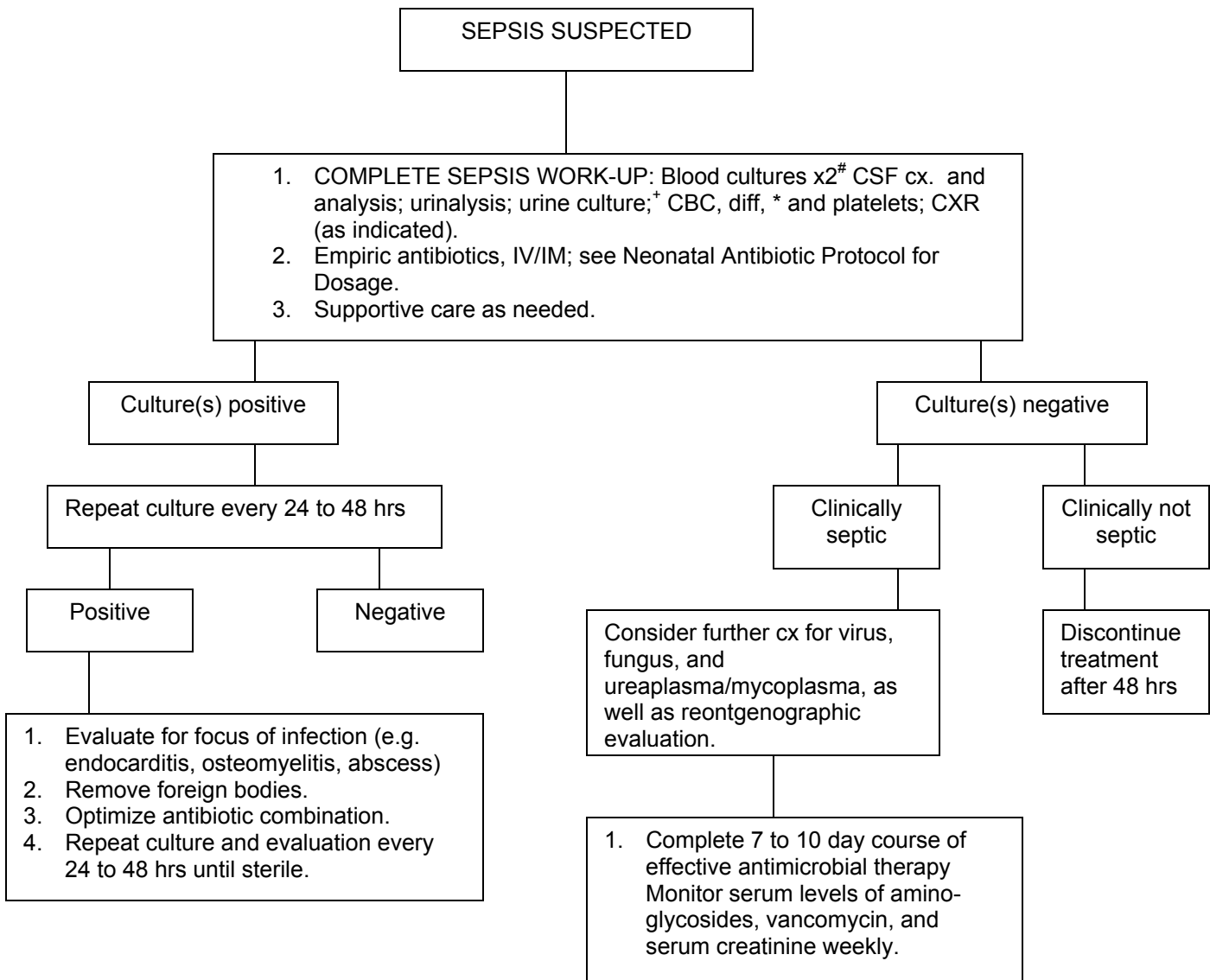
^ΩAqueous Penicillin G 50,000 U IM for babies ≥ 2,000g; babies < 2,000g receive 25,000 U IM.

The goal is to identify and treat all infected infants, but to avoid excessive investigation and treatment of uninfected infants.

Omission of a lumbar puncture in ASYMPTOMATIC infants is unlikely to jeopardize the diagnosis of meningitis because newborn infants with in utero meningitis are symptomatic.

FIGURE 5. Guidelines for Evaluation of Neonatal Sepsis

An approach to the evaluation and treatment of neonates with suspected sepsis is suggested in the following figure. Urine culture is rarely positive in the first 48 hours of life and is not required. The use of the CBC/diff in diagnosis of sepsis is discussed elsewhere.



+ Urine cultures are rarely positive in the first 48 hours of life and may be omitted from the work-up at that age. Subsequently, suprapubic bladder aspiration is preferred method.

Two peripheral cultures, or if there is a central line, one from central line and one peripheral.

* Neutropenic septic infants (ANC < 500/mm³) are at high risk of death from overwhelming sepsis. These infants should receive IVIG (750 Mg/kg), consult pathologist on call for granulocyte transfusion (15 mg/kg over 4 hrs, given as often as BID) if neutropenia persists.

Adapted from Siegel JD, Sepsis neonatorum. In: Oski FA, DeAngelis C, Feigin RD, Warshaw JB (eds). Principles and Practice of Pediatrics. 3rd Edition. Philadelphia:1999

TABLE 9. Vancomycin Reduction Protocol in the NICU

In order to reduce vancomycin usage in the NICU, the preferred alternative to vancomycin for empiric therapy of late-onset infection in the NICU is oxacillin, which is on formulary at PMH for use in the NICU. The appropriate dose of oxacillin is on the NICU pharmacy computer and it can be ordered “per protocol.” It should be used in combination with tobramycin for R/O sepsis. Please remember that 48 hours of incubation is sufficient time for a blood culture to become positive. Antibiotics should be discontinued at that time if sepsis is no longer suspected. The decision to use vancomycin rather than oxacillin for empiric therapy should be made after consultation with the fellow/attending. The following situations may be encountered; a proposed plan of action is provided:

- 1) If oxacillin is used as initial therapy, and the blood culture is positive and the infant is improved or stable, continue the same therapy until final identification and susceptibility of the organism is known. Repeat the blood culture after 24 to 48 hours of antibiotic therapy.
- 2) If oxacillin is used as initial therapy and the blood culture is positive for Gram-positive cocci in clusters (possibly coagulase-negative staphylococci or MRSA), and the infant is not doing well, then obtain a repeat blood culture and change oxacillin to vancomycin.
- 3) If oxacillin is used as initial therapy and the blood culture is positive for Gram-positive cocci in chains, and the infant is not doing well, then add ampicillin (possibly enterococcus).
- 4) If vancomycin is used as initial therapy, and cultures remain sterile at 8 hours but the infant will be treated with a full course of antibiotics for a presumed infection, then the vancomycin should be changed to oxacillin to finish the therapy.

Table 10. Recommendations for Immunizations in the NICU

Vaccine	2 months (minimum 6 wks)	4 months	6 months	Special considerations
DTaP*	1	2	3	
IPV* ¹	1	2	3	
HIB	1	2	3	
PCV7	1	2	3	
Influenza			Give at beginning of flu season (must be at least 6 months of age) ²	Give 1 month after initial dose
Hepatitis B	REFER TO TABLE 3			

*May be given in a combination as Pediarix

¹ OPV is not given while infant is in the NICU or to infants of HIV-positive mothers. If discharge is not imminent, the 3rd dose of IPV should be given (also true at 12 months of age).

² Immunize parents, contacts as well.

TABLE 11. Factors affecting neonatal neutrophil values

<u>COMPLICATION</u>	<u>ATN</u>	<u>ATI</u>	<u>I:T</u>	<u>DURATION</u>
Maternal hypertension	↓	↔	↔	minimum 72h, maximum 4-5d
Asphyxia (Apgar ≤5 @ 5)	↑↓	↑	↑	24h
Periventricular bleed	↑	↑	↑	120h
Hemolytic disease (ABO)	↑	↑	↑	28d
Maternal fever	↑	↑	↑	24h
Stressful labor	↑	↑	↑	24h
Pneumothorax	↑	↑	↑	24h
Surgery	↑	↑	↑	24h
>6h oxytocin induction	↑	↑	↑	120h

SOUTHWESTERN
THE UNIVERSITY OF TEXAS
SOUTHWESTERN MEDICAL CENTER
AT DALLAS
Department of Pediatrics
MEMORANDUM

DATE: October 17, 2006

FROM: Pablo J. Sinchez, M.D.

RE: Use of Palivizumab for Prevention of Severe RSV Disease at Parkland Health and Hospital System (PHHS) and Children's Medical Center Dallas (CMCD)

-
Palivizumab (Synagis™, 15mg/kg) administered monthly IM during the RSV season (November through March, usually maximum of 5 doses) is recommended by the AAP for prevention of severe RSV disease in high-risk infants. The following is the protocol for its administration in the NICU at PHHS and Low Birth Weight (LBW) Clinic at CMCD.* Remember that the best prevention of RSV disease is adherence to hand hygiene before and after patient contacts as well as avoidance of possible exposures; this MUST be stressed to health care workers and parents.

1) PMH NICU (Start date: October 23, 2006):

- a) Infants < 32 weeks of gestation and/or with chronic lung disease (CLDIBPD) at discharge from the NICU during the RSV season. Group infants to minimize wastage of drug.
- b) Infants 32-34 weeks of gestation: Not routine. Consider if 2 or more risk factors present: 1) child care attendance if unavoidable; 2) school-aged siblings; 3) exposure to environmental air pollutants (exclude tobacco exposure at home unless unavoidable); 4) congenital airway abnormalities; and 5) severe neuromuscular disease.
- c) Infants with severe chronic lung disease who remain in the NICU during the RSV season: Not routine. Potential infants will be assessed on an individual basis (discuss with Drs. Roy Heyne/Pablo Sinchez).
- d) Contacts of infants who develop RSV disease in the NICU: Not routine, but should be assessed individually as above. Infected infants MUST be placed in contact isolation.

2) CMC LBW CLINIC (Start date: October 23, 2006):

- a) Children < 24 months of age with chronic lung disease who required medical therapy (supplemental oxygen, bronchodilator, diuretic, or steroids for CLD) in the 6 months before the onset of the RSV season (November 1, 2006).
- b) In general, preterm infants who were < 32 weeks of gestation and are < 6 months of age at the start of the RSV season are candidates. The following scheme for palivizumab administration will be used in order to stratify high risk infants based on gestational and chronological ages during their first RSV season:

Gestational Age:	and	Chronological Age at Start of RSV Season (11/1/06)
≤ 26 wks		≤ 12 months
27-28 wks		≤ 9 months
29-31 wks		≤ 6 months
32-34 wks		≤ 6 months + ≥ 2 risk factors (listed above in lb)

3) CONGENITAL HEART DISEASE:

- a) Children ≤ 24 months of age with **hemodynamically significant** cyanotic and acyanotic CHD that has not been adequately corrected surgically (e.g. on medications for congestive heart failure or have associated pulmonary hypertension).
- b) For those who still require palivizumab after surgery that uses cardiopulmonary bypass, a post-operative dose of palivizumab should be given once medically stable.

*Questions: call (214-648-3753) or e-mail Drs. Pablo Sanchez or Roy Heyne.

RECOMMENDED DOSAGE SCHEDULE FOR ANTIMICROBIAL AGENTS FREQUENTLY USED IN NNICU/NBN

DOSAGE (mg / kg / day) AND INTERVALS OF ADMINISTRATION						
		≤28 DAYS				> 28 DAYS OLD
		BODY WEIGHT ≤2000 g		BODY WEIGHT >2000 g		
ANTIBIOTIC	ROUTES OF ADMINISTRATION	0-7 DAYS OLD	8-28 DAYS OLD	0-7 DAYS OLD	8-28 DAYS OLD	—
Ampicillin	IV, IM	100 div q 12h	150 div q 8h	150 div q 8h	200 div q 6h	200 div q 6h
Amphotericin B ¹	IV	1 once daily	1 once daily	1 once daily	1 once daily	1 once daily
Cefazolin	IV, IM	40 div q 12h	40 div q 12h	40 div q 12h	60 div q 8h	60 div q 8h
Cefotaxime	IV, IM	100 div q 12h	150 div q 8h	100 div q 12h	150 div q 8h ²	200 div q 6h
Ceftazidime	IV, IM	100 div q 12h	150 div q 8h	100 div q 12h	150 div q 8h	150 div q 8h
Ceftriaxone	IV, IM	50 once daily	50 once daily	50 once daily	75 once daily	100 once daily
Cefuroxime	IV, IM	100 div q 12h	150 div q 8h	150 div q 8h	150 div q 8h	150 div q 8h
Clindamycin	IV, IM, PO	10 div q 12h	15 div q 8h	15 div q 8h	20 div q 6h	30 div q 6h
Erythromycin	IV, PO	20 div q 12h	30 div q 8h	20 div q 12h	40 div q 8h	40 div q 6h
Flucytosine ²	PO	75 div q 8h	75 div q 6h	75 div q 6h	75 div q 6h	75 div q 6h
Metronidazole	IV, PO	7.5 div q 24h	15 div q 12h	15 div q 12h	30 div q 12h	30 div q 6h
Nafcillin	IV	50 div q 12h	75 div q 8h	75 div q 8h	150 div q 6h	150 div q 6h
Oxacillin	IV, IM	50 div q 12h	75 div q 8h	75 div q 8h	150 div q 6h	150 div q 6h
Penicillin G	IV	100,000 U div q 12h	225,000 U div q 8h	150,000 U div q 8h	200,000 U div q 6h	200,000 U div q 6h
Penicillin G for Congenital Syphilis	IV	100,000 U div q 12h	150,000 U div q 8h	100,000 U div q 12h	150,000 U div q 8h	200,000 U div q 6h
Benzathine Penicillin G	IM	50,000 U (one dose)	50,000 U (one dose)	50,000 U (one dose)	50,000 U (one dose)	50,000 U (one dose)
Procaine Penicillin G	IM	50,000 U q 24h	50,000 U q 24h	50,000 U q 24h	50,000 U q 24h	50,000 U q 24h
Rifampin ⁴	IV, PO	10 div q 12h	10 div q 12h	10 div q 12h	10 div q 12h	10 div q 12h
Ticarcillin	IV, IM	150 div q 12h	225 div q 8h	225 div q 8h	300 div q 6h	300 div q 6h
DOSAGE (mg / kg / DOSE)		GESTATIONAL AGE PLUS WEEKS OF LIFE				
		≤ 26 WK	27-34 WK	35-42 WK	≥ 43 WK	
ACYCLOVIR	IV	20 q 12h	20 q 12h	20 q 8h	20 q 8h	
AMIKACIN ⁵	IV, IM	7.5 q 24h	10mg q 24h	15mg q 24h	15mg q 24h	
GANCICLOVIR ⁶ IV	IV	6mg q 24h	6mg q 18h	6mg q 12h	6mg q 12h	
GENTAMICIN ⁶	IV, IM	2.5 q 24h	3mg q 24h	.4mg q 24h	4mg q 24h	
NBN GENTAMICIN ⁷	IV, IM	NA	(34 wk only) 4 q 24h	4q 24h	4q 24h	
TOBRAMYCIN ⁸	IV, IM	2.5 q 24h	3mg q 24h	4mg q 24h	4mg q 24h	
VANCOMYCIN ⁸	IV	15 q 24h	15 q 18h [*]	15 q 12h [*]	15 q 8h [*]	
ZIDOVUDINE	IV		1.5 q 12h		IV: 1.5 mg q 6h	
	PO		2 q 12h		PO: 2 mg q 6h	
OTHER ANTIMICROBIAL AGENTS						
MEROPENEM IV ⁴ (Requires ID Approval)		Sepsis: 20 mg q 12h		MENINGITIS 40 mg q 8-12h		
PO Prophylactic Dosing						
Amoxicillin po Nitrofurantoin po Nevirapine po		25 mg/kg/day 1-2 mg/kg/day 2 mg/kg/dose		UTI prophylaxis UTI prophylaxis HIV - Exposed Infant		
² Increase dose to a maximum of 150 mg / kg / day to achieve level of 50-70 μg / ml. ¹ Initial dose 0.5 mg / kg / day x 1; then 1.0 mg / kg / day. IV infusion over 2-4 hrs ³ 50 mg / kg q 6hr if > 21 days old. ⁵ Desired levels: PEAK 20-30 μg / ml TROUGH < 8 μg / ml ⁶ Desired levels: Peak: 5-10 μg / ml; trough; < 2 μg / ml ⁷ Desired levels: Peak: 6-12 μg / ml; trough; < 2 μg / ml ⁸ Desired levels: Peak: 20-40 μg / ml; trough; < 10 μg / ml (Adapted from Nelson JD. Antibiotic Therapy for Newborns. In: Pocket Book of Pediatric Antimicrobial Therapy: Baltimore: Williams & Wilking, 1998-1999)						
⁴ REQUIRES I.D. APPROVAL.				*AT 28 DAYS OF LIFE (4 WKS) VANCOMYCIN IS DOSED AT 20 MG / KG / DOSE. THE INTERVAL REMAINS THE SAME		
(Table prepared by Pablo J. Sanchez, MD)						