**Table 1.** Comparison of recommendations of American Thyroid Association and Endocrine Society on the time and target group for screening for hypothyroidism before and during pregnancy

| Who shoul                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | d be screened?                                                                                                                                                                                                                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| American Thyroid Association guideline (2011)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>Endocrine Society guideline (2012)</b>                                                                                                                                                                                                                                                                             |
| There is insufficient evidence to recommend for or against universal TSH screening at the first trimester visit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Some members recommended screening of all pregnant women for serum TSH abnormalities by the 9th week or at the time of their first visit. Others recommended against universal screening of pregnant women at the time of their first visit and instead supported aggressive case finding to identify high-risk women |
| A case-finding approach targeting thyroid function testing in high-risk groups has been advocated                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | The same                                                                                                                                                                                                                                                                                                              |
| Who are the                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | high risk group?                                                                                                                                                                                                                                                                                                      |
| Women with a history of thyroid dysfunction and/or thyroid surgery, Family history of thyroid dysfunction goiter, Women with anti-thyroid antibodies, having symptoms or clinical signs suggestive of hypothyroidism. type I diabetes or autoimmune disorders, history of either miscarriage or preterm delivery, infertility, prior therapeutic head or neck irradiation, morbid obesity, age 30 or older, treated with amiodarone or lithium, a recent (in the past 6 weeks) exposure to iodinated radiological contrast agents, Residing in an area of known moderate to severe iodine insufficiency | The same                                                                                                                                                                                                                                                                                                              |
| When should high r                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | isk women be screened?                                                                                                                                                                                                                                                                                                |
| There is insufficient evidence to recommend for or against TSH testing preconception in women at high risk for hypothyroidism                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Test high-risk women for elevated TSH concentrations<br>by the ninth week or at the time of their first visit before<br>or during pregnancy                                                                                                                                                                           |
| All pregnant women should be verbally screened at the initial prenatal visit for any history of thyroid dysfunction and/or use of thyroid hormone (LT4) or anti-thyroid medications (MMI, carbimazole, or PTU). Level B-USPSTF                                                                                                                                                                                                                                                                                                                                                                          | All women considering pregnancy with known thyroid dysfunction and receiving levothyroxine should be tested for abnormal TSH concentrations before pregnancy                                                                                                                                                          |
| Serum TSH values should be obtained early in pregnancy in women at high risk for overt hypothyroidism                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                       |
| The same                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | All women considering pregnancy with known thyroid dysfunction and receiving levothyroxine should be tested for abnormal TSH concentrations before pregnancy as well as during the first and second trimesters of pregnancy                                                                                           |

**Table 2.** Comparison of recommendations of the American Thyroid Association and the Endocrine Society on the management of hypothyroidism before and during pregnancy

| Treatment of hypothyroidism (Overt or subclinical) in pregnancy                                                                                                                                                                                                                                                                                                                |                                                                   |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|--|
| American Thyroid Association guideline (2011)                                                                                                                                                                                                                                                                                                                                  | <b>Endocrine Society guideline (2012)</b>                         |  |
| Overt hypothyroidism should be treated in pregnancy                                                                                                                                                                                                                                                                                                                            | The same                                                          |  |
| Isolated hypothyroxinemia should not be treated in pregnancy                                                                                                                                                                                                                                                                                                                   | No recommendation                                                 |  |
| Due to the lack of randomized controlled trials there is insufficient evidence to recommend for or against universal LT4 treatment in TAB negative pregnant women with SCH                                                                                                                                                                                                     | T4 replacement in women with SCH who are TPO-Ab negative subjects |  |
| Women who are positive for TPOAb and have SCH should be treated with LT4                                                                                                                                                                                                                                                                                                       | The same                                                          |  |
| The recommended treatment of maternal hypothyroidism is with administration of oral LT4. It is strongly recommended not to use other thyroid preparations such as T3 or desiccated thyroid                                                                                                                                                                                     | The same                                                          |  |
| The goal of LT4 treatment is to normalize maternal serum TSH values within the trimester-specific pregnancy reference range (first trimester, $0.1$ – $2.5$ mIU/L; second trimester, $0.2$ – $3$ mIU/L; third trimester, $0.3$ – $3$ mIU/L)                                                                                                                                    | The same                                                          |  |
| Women with SCH in pregnancy who are not initially treated should be monitored for progression to OH with a serum TSH and FT4 approximately every 4 weeks until 16–20 weeks gestation and at least once between 26 and 32 weeks' gestation                                                                                                                                      | No recommendation                                                 |  |
| Treated hypothyroid patients (receiving LT4) who are newly pregnant should independently increase their dose of LT4 by $\sim$ 25%–30% upon a missed menstrual cycle or positive home pregnancy test and notify their caregiver promptly. One means of accomplishing this adjustment is to increase LT4 from once daily dosing to a total of nine doses per week (29% increase) | The same                                                          |  |
| There exists great interindividual variability regarding the increased amount of T4 (or LT4) necessary to maintain a normal TSH throughout pregnancy, with some women requiring only 10–20% increased dosing, while others may require as much as an 80% increase                                                                                                              | Almost the same                                                   |  |

Table 3. Follow-up of pregnant women with overt or subclinical hypothyroidism with LT4 during

| Monitoring of pregnant women being treated for hypothyroidism                                                                                                                                                                                                                                                   |                                           |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|--|
| American Thyroid Association guideline (2011)                                                                                                                                                                                                                                                                   | <b>Endocrine Society guideline (2012)</b> |  |
| In pregnant patients with treated hypothyroidism, maternal serum TSH should be monitored approximately every 4 weeks during the first half of pregnancy because further LT4 dose adjustments are often required and, maternal TSH should be checked at least once between 26 and 32 weeks gestation             | The same                                  |  |
| Following delivery, LT4 should be reduced to the patient's preconception dose.  Additional TSH testing should be performed at approximately 6 weeks postpartum                                                                                                                                                  | The same                                  |  |
| In the care of women with adequately treated Hashimoto's thyroiditis, no other maternal or fetal thyroid testing is recommended beyond measurement of maternal thyroid function (such as serial fetal ultrasounds, antenatal testing, and/or umbilical blood sampling) unless for other pregnancy circumstances | No recommendation                         |  |