

BÖLÜM 7

Prostat Kanserlerinde Genomik Özellikler

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GİRİŞ

Prostat kanseri, erkek bireylerde kanser ilişkili ölümün en sık sebeplerinden biridir (1, 2). Ortalama tanı yaşı 66 olmakla birlikte artan yaşla birlikte insidans ve mortalite oranları artış göstermektedir (3). Hastalığın sıklık ve özellikleri epidemiyolojik faktörlerden oldukça etkilenmekte olup, genetik etyoloji popülasyonlara göre farklılıklar göstermektedir (4). Bazı varyantlar bir toplumda oldukça nadir iken; bir başka toplumda aynı varyant yaygın görülebilmektedir (5).

Prostat kanseri fenotipik açıdan oldukça geniş spektrumlu olup, lokalize stabil tümörden yüksek düzeyde agresif, metastatik ve fatal kansere kadar değişkenlik gösterebilmektedir (6-9). Bu durum, hastalık ile mücadelede tamamen tutarlı, ortak bir yönetim stratejisi geliştirilmesini zorlaştırmaktadır.

Prostat kanseri gelişiminin altında yatan genetik ve metabolik yolların daha iyi anlaşılması; yeni tedavi hedeflerinin keşfedilmesine, kişiselleştirilmiş tedavi planlarının yapılabilmesine, erken tanı, tarama bağlamında önemli biyo-belirteçlerin geliştirilmesine olanak sağlamak adına önemli bir potansiyel taşımaktadır.

PROSTAT KANSERİ İLİŞKİLİ GENEL GENETİK ÖZELLİKLER

Prostat kanseri onkogenezi; kalıtlılabilir germline yatkınlık etkenleri, sonradan edinilmiş somatik genetik değişimler ve çevresel etkenlerin kompleks etkileşimi sonucu oluşmaktadır. Kronik inflamasyon ve enfeksiyonlar oksidatif stres artışının sonucu olarak DNA hasarına neden olmaktadır (10). Bu hasar sonu-

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